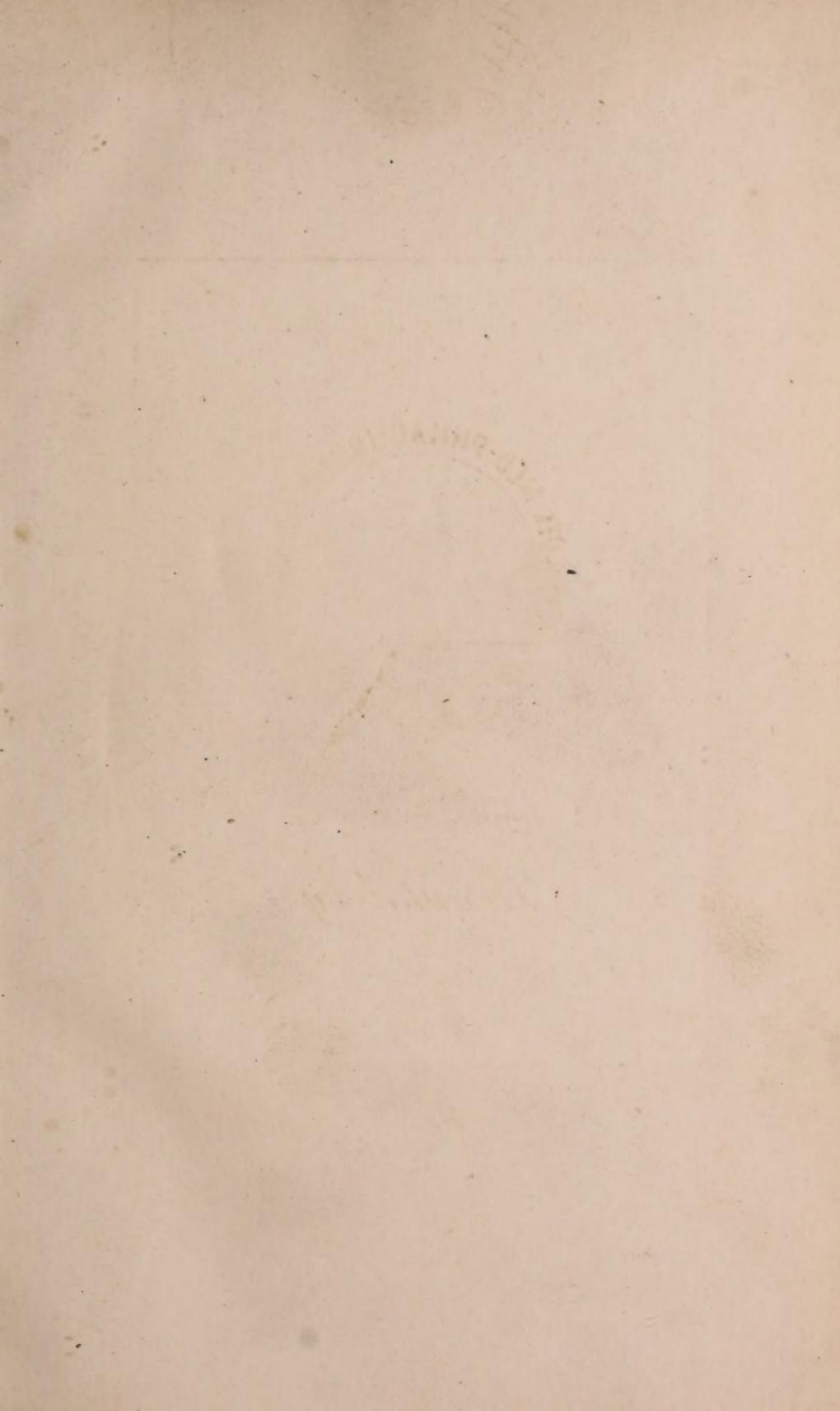


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THE CINCINNATI

LANCET AND OBSERVER.

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DR. W. W. DAWSON'S
Case of excision of the Clavicle

* *Cicatrix.*

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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JANUARY, 1868.

No. 1.

Original Communications.

ART. I.—*Excision of the Entire Clavicle.*

By W. W. DAWSON, M. D., Surgeon to Commercial Hospital, Cincinnati, O.

NEAR the middle of August, 1867, J. L. Black, aged about twenty years, son of Dr. Milo Black, of Clay City, Ill., consulted me in reference to a fistula situated on the right side and about midway between the sternum and the point of the shoulder. An examination showed extensive disease of the Clavicle.

The following is the history furnished me by Dr. Black; "About the 15th of December, 1866, my son was taken with a pain in his right shoulder, accompanied with a high grade of fever. There was no swelling for the first two or three days, but subsequently it began and extended from the outer point of the right to near the middle of the left Clavicle. I applied a blister and in about one week from the attack erysipelas showed itself upon the breast and extended rapidly until the entire head was involved. His fever now assumed a low typhoid grade accompanied with delirium, hectic, sweating and a total loss of the use of the right arm. This state of things existed for about two weeks, after which abscesses formed over the breast, on the face, and at the left elbow. Occasionally he would complain of great pain in his back, reaching from his right shoulder to the lumbar region. He could neither raise up nor lie down in bed without help for the space of three months. I opened abscesses to the number of ten or twelve; they all finally healed but the one you saw when he called upon

you. The treatment consisted first in blood letting, blistering, alteratives and opiates. Later in the case, tonics, stimulants, and a generous diet were prescribed. The whole trouble I think grew out of a kick from a gun which he received while he was hunting, a few days previous to the manifestation of the first symptoms."

Assisted by Dr. Black, Dr. Jones, of Madisonville, and Dr. Brunning, of the Good Samaritan Hospital, I operated on the 3d of September. In cutting down, I was surprised to find the disease so extensive, involving the entire bone. I decided at once to remove the whole mass.

The line of incision was made over and down to the Clavicle. The bone was in a state of necrosis, the acromio-clavicular articulation had perished, hence, at this point, it was not necessary to use the knife.

After the dissection of the Clavicle, I found on the outer surface of the first rib a small point of caries about half an inch in length and the width of the bone border; this I removed with the chisel. There was but little hemorrhage. Water dressings were applied for a few days, then poultices. The wound healed slowly but constantly.

On the 19th of October, forty-six days after the operation, I presented my patient to the Clinical class of the Commercial Hospital, with the wound healed entirely, presenting the appearance which is given in the engraving.

His father writes me, Nov. 13th, as follows: "My son J. L. Black, has arrived at home; he is quite well. I had advised him to remain in your city this winter and attend Commercial College, but he concluded to return to Illinois."

The deformity in this case, as the engraving shows, is very little, a slight depression of the right shoulder is all that can be observed. He has complete use of his arm, and imagines that it is as strong as it ever was.

The tissues in the region of the cicatrice are hard and firm, but what the osteogenic properties of the periosteum which I left, may accomplish in the formation of a new Clavicle, is yet to be developed.

Prof. Gross, in his System of Surgery Vol. II, page 995, gives the history of operations for the removal of the whole or part of the Clavicle as follows: "Mr. Davie, many years ago, excised the inner extremity of the Clavicle in a case of dislocation back-

wards from deformity of the spine, the luxated head causing such a degree of pressure upon the æsophagus as to endanger life by inanition. Having made an incision from two to three inches in length over the bone, in a line with its axis, and severed its ligamentous connections with the sternum, he divided the bone about one inch from its articular end, by means of a Hey's saw, the soft parts being protected by a piece of sole-leather. The patient speedily recovered and survived the operation six years. In my private collection is nearly the whole of the left Clavicle, which I removed in 1849, on account of necrosis, from a lad thirteen years old. In 1813, Dr. Charles McCreary, of Kentucky, amputated the right collar bone at its articulations, for scrofulous caries. The patient, a boy aged fourteen, survived the operation many years, enjoying, it is affirmed, excellent use of the corresponding limb. A similar operation was successfully performed in 1852, by Dr. A. J. Wedderburn, of New Orleans, in 1856, by Professor Blackman of Cincinnati, and in 1860, by Dr. Fuqua, of Richmond. In the latter case, however, the sternal end of the bone was saved. In 1828, Dr. Mott removed the entire Clavicle on the left side, on account of an osteo-sarcometous tumor, of great hardness, conical in its shape and four inches in diameter at its base. The operation was one of immense delicacy and difficulty, requiring nearly four hours for its execution, and more than forty ligatures for the suppression of the hemorrhage. The patient, notwithstanding, made an excellent recovery, and by means of an apparatus contrived for the purpose, had a perfect use of the arm, being able to move it in all directions. The history of the case, with a detail of all the steps of the operation, may be found at length in the American Journal, of the Medical Sciences, for 1828, and also in Dr. Mott's edition of Velpeau's Surgery.

The entire Clavicle has also been removed, on account of osteosarcoma, by Dr. Charles R. S. Curtis, of Chicago. The operation was performed in 1856, but the patient, a woman aged twenty years, had a return of the disease at the cicatrice at the expiration of two months. A similar but more formidable operation was performed by the late Dr. E. S. Cooper, of California."

In addition to the above may be added the cases of Travers, Warren, Gunn, of Chicago, and a second operation by Blackman.

ART. II.—*Hydrophobia.*

Resume of a Lecture by TROUSSEAU, Vol. I, Part III, Clinical Lectures.

WE have read the lectures of the late lamented Troussseau, and none with more pleasure than part III, just published, and especially the last lecture with the above title.

The Professor gives a very graphic description of the disease in all its stages in man, as in animals, as well as the pathology, and discusses the subject of incubation at some length, and gives a general resume of the treatment recommended by eminent men, which we shall quote from at some length, and which may not be uninteresting to your readers.

The History.—Case first is very interesting, and I quote at some length: "During the night of January 23, 1861, my clinical assistant, Dr. Dumont Pallier, was summoned, in all haste, to see a patient who was suffering from what was termed 'an *indigestion of water*.' On his way there the Doctor was told that the patient complained of intense thirst, and was firmly bent on drinking, but could not carry water to his lips without being seized with a deep feeling of terror. He could not take any solid food either. Age thirty seven. By closely questioning the patient's friends he ascertained that about the end of September, that is four months previously, the patient had been bitten in the hand by a small pet dog, which had on the same occasion bitten a little girl eight years old, and a man-servant about thirty years of age, and a young cat. * * As the child, the servant, and the cat were perfectly well, at the end of January, 1861, nothing had occurred to create alarm in the patient's family. When the Doctor saw him he was walking about his room in the greatest agitation, unable to remain quiet a single moment. He looked fixedly before him; pupils were dilated; face extremely pale, and his hair and beard disordered. The expression of his physiognomy was that of great anxiety; he spoke in a curt and jerked manner, and complained of great dryness of the throat, and of his being obliged to keep spitting incessantly. Whenever he spat out the saliva the whole body shivered. The room was lighted up with candles and a lamp; over the mantelpiece was a looking-glass, and on the shelf a water jug; as the sight of these objects gave the patient no pain, there was, therefore, no hyperæsthesia of the eye, but the skin was painfully sensitive. The patient dreaded to touch his face and to rest his hands on his clothes; he refused to allow his pulse to be felt, and in order to shorten the

examination, he wished by taking a glass full of water to show that he could not drink, although he had a firm intention of doing so, for he took up the glass and raised it to his lips, but he immediately rejected the water which, by a rapid movement, he had got into his mouth. This voluntary experiment brought on no convulsions, the patient was merely more agitated for a few minutes, and then, having calmed down, he tried to relate what he had felt since January 20th. He had been sad for a long time, he said, in consequence of money losses, and had gone to Rheims, on January 13th, to stay with some friends, in hopes that he might be cheered up. From January 13th to the 20th, he had felt no *mataise*. The history goes on to state that he went out to ride in the country in an open carriage, with some friends, the weather being cold; ate in the morning as usual; was very thirsty, and stopped several times to drink; no difficulty of swallowing; water seemed to be cold to him; was seized with violent shivering, and went to bed on his return to Rheims; did not sleep any at night; got up because he felt giddy when lying down; walked about his room feeling very agitated; did not feel hungry; could still drink; was very agitated during Monday, both day and night; mind was perfectly clear; Dr. Bienfait, (of Rheims,) describes his symptoms from January 21st, as follows: "The patient was in a state of considerable agitation; face pale; eyes extraordinarily mobile; breathing and the action of the heart somewhat hurried; tongue had a slight coating of yellowish fur, and was of a somewhat brighter tint along the edges and the raphe. The patient drank in my presence, but with a certain degree of convulsive haste, as everything else he did. Dr. Bienfait thought that the case was one of indigestion attended with a nervous condition, depending on the patient's idiosyncracy; he prescribed a mixture containing opium. In the evening found the patient in a still more agitated state; he had taken his mixtures, but each time, after heroic efforts, on attempting to take a dose in the Doctor's presence, it was immediately thrown out by a sudden spasm, which seemed to spread from the muscle of the pharynx to the orbicularis oris; yet the patient had collected all his strength for the effort; he had taken three steps backward, and had thrown his arms about him as if he wished to get all obstacles out of the way. The Doctor thought the patient was suffering from hydrophobia. On the following morning the symptoms were aggravated, there was general hyperesthesia. The Doctor was then in-

formed by the patient's friends, that about the month of September, the patient had been obliged to sacrifice a small king Charles, who was suffering, according to a Veterinary Surgeon's accounts, from rabies. Patient was probably aware of the circumstance, but never made any allusion himself to his dog having been mad. Nothing had been done to try and avoid ill consequences from the bite. On ausculting his chest, found that the vesicular breathing was perfectly pure, but was interrupted at each inspiration by one or more suppressed sobs as it were. The heart's impulse was notably irregular, and the pulse at the wrist was equally so; the irregularity of the latter being attended with a sort of vascular spasm, which could not be defined, but was very remarkable. During this time the patient had no delirium or anything like it, and never had the least wish to bite. He only spake of some instinctive dread, and had a marked tendency to be communicative. He had no idea of the real nature of his complaint, and had no recollection of having been bitten. Imagination, therefore, seemed to have nothing to do with the manifestation of the symptoms recorded.

"The patient insisted on returning to Paris. During the journey, he was very greatly agitated, and extremely thirsty, his thirst being temporarily relieved only by keeping small lumps of ice in his mouth, but in all probability the patient, who was constantly spitting, could not swallow the melted ice, and therefore complained of a sensation of constriction and great heat in the throat. He had during the journey frequent erections and seminal emissions: the hyperæsthesia of his genital organs, gave him great pain. Prof. Troussseau goes on to say that he was admitted into the Hotel Dieu, and on January 24th, that is, three and one-half days after the invasion of the disease, he saw him. The patient was so agitated that many thought him to be suffering from acute mania. He had a strange aspect and was unable to swallow liquids; on attempting to drink he clutched the glass with force, saying; "I wish to drink, and I will," and then carried it with determination to his lips, but as soon as the water had passed his lips, his face assumed a look of excessive pain, and his whole body was within a short time shaken with violent convulsive trembling. He then exclaimed, "I cannot drink, do make me drink."

"When calm had returned after this paroxysm, I was enabled to ascertain that there was redness of the soft palate and phar-

ynx, and great dryness of the tongue. The patient's beard was also soiled with a frothy saliva, which he kept constantly spitting out. The lateral and under surfaces of the tongue were carefully examined; the patient was docile, and no desire to bite, but we could not discover any of those swellings which have been called *lyssi*.¹

Of these *lyssi*, the Professor describes further on, and we shall there give his observations:

"I merely recommended that the patient should be watched and nothing else", as experience had taught me that we are *completely powerless* against this cruel malady." (The *Italics* are our own.)

The history goes on to say that the presence of his (the patient's) friends gave him pain; that an æsophagus tube was introduced through the nares into the stomach, and about seven ounces of broth were gently poured in. Half of this quantity had already reached the stomach, when the fluid ceased to run, from the tube being compressed by a violent spasm of the pharynx and æsophagus.

The spasm soon spread to the respiratory muscles, the face turned livid, and the eyes opened and stared. The tube was removed, and the patient, who had been sitting on a chair, slipped down on the floor like an inert mass—it was thought he had died. ** Artificial respiration was resorted to, respiration re-established, after which the patient ejected to some distance, a certain quantity of saliva or bronchial froth. During the paroxysm, there had been an erection of the penis, with ejaculation. He was put into bed and tied lest he should fall out. He let us do what we liked with him. ** In the course of the evening he had several convulsive paroxysms, and died suddenly at half past ten, after having been violently agitated for a few seconds. A post-mortem examination was made the next morning. The body was exceedingly rigid, the face livid, and the whole posterior aspect of the trunk and limbs presented numerous suggillations. The brain and parenchymatous organs were congested. The mucous membrane of the mouth and pharynx were very markedly injected. Some of the saliva was taken to inoculate dogs with, but the experiment gave no result. The Professor goes on to say:

"If we now sum up the principal facts in the case, we find that a man was bitten by a dog in September, 1860, a little girl and another man was bitten on the same occasion, as well as a cat, by the same dog, and at the end of January, 1861, the master of the house, the person first bitten, alone manifested symp-

toms of rabies. Before that date the patient was mad, but this was ascribed to money losses.

He leaves Paris in search of recreation, when suddenly, a few hours after a breakfast, eaten with relish, he complains of very intense thirst. He soon is seized with general shivering, and from that moment he loses his appetite, and the capacity of swallowing liquids, while he becomes extremely agitated.

He goes on in that way for about thirty-six hours. General hyperesthesia is then noted, and from that time he can not wash his hands or face, the least attempt of the kind immediately bringing on great agitation and violent shivering, and the same thing occurs when he tries to comb his hair or beard; he dreads touching his person with his own hands. It is probable that the hyperesthesia which existed then determined, through a reflex action on the least contact of the skin, convulsions which assumed the form of general shiverings. There were rare intervals of quiet. To the cutaneous hyperesthesia there is then superadded very acute and frequently repeated excitations of the genital organs, and frequent erection, attended with seminal emission, which increases the patient's agitations. Three days after the invasion of the disease, his aspect creates alarm; he is agitated, extremely garrulous, speaking in a curt jerking manner; he can not drink, although he is intensely thirsty, and when he attempts to doze, he is immediately seized with clonic convulsions and spasms. The hyperesthesia and satyriasis persists throughout the twenty-fourth day of January, the convulsive paroxysms become more frequent, and death occurs on the fourth day of the complaint, without the patient having manifested any mental disorder, any hallucination of sight or hearing."

"Two periods were observed in the patient's case; one of sadness and melancholly, the other, which may be termed period of *agitation*, and which set in with thirst and shiverings, soon followed by a dread of water and by convulsions, which continued until his last moments. It is important to note that, as well as general hyperesthesia, there was satyriasis present, a fact rarely mentioned in recorded cases of rabies.

"Boerhaave, however, mentioned priapism as one of the symptoms of rabies in man, and Van Swieten states, in *Commentaries*, that Galen has mentioned the fact."

"Dr. Peter has also noted frequent seminal emissions in the case of a soldier, who was admitted in 1862, into the military

hospital of Gros Caillon, under Dr. Worms. The priapism was almost constant, and the emissions were attended with voluptuous sensations, as showed by the prurient expressions used by the patient."

Nymphomania has been sometimes noted in women, as in the case reported by Dr. Bricheteau. The Professor goes on to relate several interesting cases that came under his own observation, and that of other practitioners, and sums up as follows: "Most authors entertain no doubt as to asphyxia being the cause of death in hydrophobia, and in a case related by Dr. Bergeron, the details given show the patient died of asphyxia. In this instance, the asphyxia seemed to have been *gradual* and not *sudden*."

The Professor says: "I would not dare to state positively that all individuals affected with hydrophobia must necessarily die of asphyxia, because of the rapidity, the suddenness with which death occurs in some cases. Yet, I believe that rapid asphyxia from closure of the glottis, or slow asphyxia from repeated spasm of the respiratory muscles, is the most frequent mode of termination of this complaint."

Prof. Treusseau then describes what he calls *mental hydrophobia*, of which we will only give the following cases of a judge, who, as the Professor says, "had once believed himself to be seized with hydrophobia. He used to go out riding frequently, and a sporting dog which usually accompanied him, often jumped to kiss the hand with which he held his whip. During one of these rides they once met a flock of sheep, after which the dog ran, biting those he could catch. The animal still heard and obeyed his call, but he had a strange aspect. Again he ran after and bit hogs, cows and oxen, and lastly swam across a river; a few hours later he died. A short time after this, the judge heard that many of the beasts that had been bitten by his dog, had died of rabies. This news alarmed him, because he recalled to mind that on the same day the dog had licked his right hand several times. On examining his hand he found several small scars on it, and seized with terror upon this, he no longer dared to touch water to shave himself, and fully believed he had hydrophobia. A medical man who was sent for, tried in vain to calm his fears: for several days he was excited and delirious. At last being told over and over again that persons seized with rabies died very rapidly, and that he could not therefore be rabid, since his dread of water dated already ten days back, he allowed himself to be persuaded, and

his dread of water vanished as soon as he became convinced that he should have died long ago, if he had been rabid."

The Professor goes on to say that medical men may be deceived, if they do not bear in mind that the duration of real hydrophobia invariably kills in three or four days from the first manifestation of the symptoms.

In the *Cincinnati Journal of Medicine*, Vol. II, No. VI, page 350, we find a case of hydrophobia reported by Dr. James I. Rooker, of Castleton, Indiana, in which the patient, a lady, recovered. In the *Cincinnati Lancet and Observer*, Vol. X, No. X, page 614, we find a letter from Dr. J. V. Hoss, in which he says: "The young lady who suffered from hydrophobia last spring, and was treated for it by Dr. Rooker, is in excellent health, and has been ever since, except a slight injury caused by being thrown from a horse."

As every medical man is well aware that almost all, if not all, the symptoms found in hydrophobia are also found in cases of hysteria, yet from the history Dr. Rooker gives of his case, I am inclined to think that it was not one of hysteria, nor of true hydrophobia; but of the class of cases that Troussseau denominates *nervous or mental hydrophobia*, and of which we have quoted one case.

Prof. Troussseau, in his lecture, goes on to describe at some length, the disease as it is found in the dog and other animals, and also the period of incubation, and thinks that by its being recognized in the dog, we will lessen the number bitten, for the animal will always be destroyed when diseased. That the disease is transmitted by the saliva, there seems to be no doubt, as in those cases where the bitten part has been protected by the clothing, the person is almost entirely exempt from disease; whereas, it almost always follows after having been bitten on some exposed part, as the hand or face. In regard to the saliva, from a rabid individual, Troussau says: "I am of opinion that one should prudently avoid all contact with the patient's saliva, as the dog's saliva is capable of imparting the disease to man, and as it has been shown by experiments made by Magendie and Breschet, in 1813, and afterwards confirmed by Renault, at Alfort that dogs have become mad after being inoculated with the saliva of a rabid man."

As regards the term *lyssi*, of which mention has been made, the Professor says: "In the beginning of this century, a Russian physician, Dr. Marochetti, in a memoir on hydrophobia, and Dr. Xan-

thos. of Siphnos, in a letter to Hufeland, called attention to the presence on the under surface of the tongue, near the fraenum, of pustules or vesicles of a special character, during the stage of incubation of rabies. These had been long known in Greece under the name of *lyssi*. Drs. Marochetti and Xanthos did not claim for themselves the credit of this important discovery; it was traditionally known, they said, in Russia and in Greece, and they had been told that if these vesicles or pustules were laid open in time and cauterized, all manifestations of rabies were prevented.

The Professor says, the presence of this vesicular eruption under the tongue is a fact of great importance, and the reason practitioners have not recognized it during the incubation of rabies, was that it was not looked for at all or at the right time.

Dr. Magistel says, that he saw the *lyssi* in different individuals on the sixth, the eleventh, and the twentieth days, and that after the twenty-second he never succeeded in finding them, although he looked for them until the thirty-fourth day after the inoculation of the virus. * * * * Although we do not know at what period this eruption will occur, yet it should always be searched for in persons who have recently been bitten by a rabid animal.

If the statements thus given were confirmed, we would then have a prevention to the most terrible disease we have to meet with. For in this *lyssi* we would then know that the virus had been inoculated, and according to the Professor cauterization of this pustule or vesicle, destroys the poison and leaves the patient perfectly free. I would especially call the attention of American physicians to this matter, and to make observation in all cases, and to report the facts as they are found.

We must, for want of space, pass over that portion of Troussseau's lecture treating of the *prognosis* and *etiology*, and will only make a few extracts on the treatment.

He says: "I believe that rabies is never generated, *de novo* in the human subject, but is communicated by the dog. We should, therefore, learn to recognize and guess it even in the animal, as he can so easily transmit it by his caresses or bites. Lastly, after inoculation has occurred, measures should be unhesitatingly employed, which destroy at once all property in the virus, and prevent the fatal evolution of the disease. Cauterization is, after all, the only measure from which a successful result may be anticipated, and in order to insure success it should be done

immediately after inoculation of the virus. Delay allows absorption to take place, and the part should therefore be at once and deeply cauterized. By going beyond the area of the virulent inoculation, a more or less extensive wound will be produced, but which gives rise to no risk, while imperfect cauterization exposes the patient to the risk of dying."

Either a red-hot iron—the acid nitrate of mercury—caustic potash, and corrosive sublimate, answers the purpose. The first and chief indication being to act quickly and deeply.

After the disease has fully set in, various kinds of treatment have been recommended. Rousseau thinks that chloroform might be used against the spasm, but in order to be successful the convulsions should be forestalled, and the patient should be kept under its influence every day for several hours. He also recommends morphia used by the endermic or hypodermic method. The Chinese believed the following formula to be *infallible*.

R. Musk, ʒ ss.

Native Cinnabar.

Artificial Cinnabar. aa ʒv.

These substances were rubbed down together to an impalpable powder, and were then given suspended in a spoonfull of rice spirit. Calm sleep and copious perspiration came on after two or three hours; otherwise a second dose of the powder was given and a cure was considered as sure to follow.

The editor of Prof. Rousseau's lectures, P. Victor Bazire, M. D., in a note goes on to say, "that patients die of asphyxia, and suggests tracheotomy, not merely to allow time for the parts to recover themselves, but to prevent the immediate risk of death by asphyxia, and also to allow time for the physician to act to try and subdue or remove, by the subcutaneous injection of morphia or atropia, the excessive nervous excitability of the patient."

This might be tried, but I fear it would not be attended with favorable results. We have already extended our remarks so far that we can only regret that Rousseau has not been able to give us a reliable plan of treatment for this formidable disease.

G. S. C.

ART. III.—*The Local Treatment of Anthrax.*

BY S. SEXTON, M. D., Cincinnati.

WHEN one has a case of Anthrax to treat, the systematic works on surgery are apt to be consulted, for the disease is one of infrequent occurrence in the private practice in this country, and there is always anxiety felt for the patient.

It will be found that little variation exists in the treatment recommended by modern authors who treat this branch of medicine. It is usual, perhaps the rule is universal, to recommend free incisions to be made into the diseased part, extending to healthy structures at the periphery. This to be followed by the application of escharotics. The expressive term heroic might be applied to this method of practice, but it evidently is not based on any scientific conclusion deduced from known pathological principles. In this hyperemic condition of the part, the supply of systemic blood is of a depraved character. The inflammation established is not prone to healthy suppurative resolution. The treatment above mentioned, may relieve the congestion, but at best only an indolent ulcer is established, very slow to heal.

A plan which will sustain the capillary walls, restore their tonicity, thereby relieving the capillary stasis, would prevent the formation of slough and permit the healthy granulating process to occur. At the same time the action of the organs of assimilation should be corrected, so that the quality of blood going to the part would tend to produce healthy action. The result desired, happily, may be produced by the ascertained action of belladonna, when applied to the cuticle in the manner to be mentioned.

The pathology of this affection of the cutaneous and cellular tissues, as far as known, is familiar to most persons called to treat it, and it is not designed to offer anything upon the subject of constitutional management. However, it must be borne in mind that without an improvement of the secretions and support of the system, local means will avail but little.

Thus briefly premising the local treatment recommended is, to apply over the carbuncle a plaster, spread upon chamois, of the following constituents, viz.

R.—Emplas Belladon, two parts.

Ext. Opii aq, one part.

M.—Spread as required.

The plaster should be large enough to extend as far as the

diseased action manifests itself and a little beyond. As the subjects of this affection do not come under the surgeons care until the peculiar honeycomb appearance of the surface is to be seen, the plaster should have, at its center, a conical incision large enough to permit transudations to escape, and also whatever pus may be secreted. The plaster, when ready, is to be applied firmly over the part and bound down by strong adhesive strips.

The adhesive strips should, before they are applied to the skin, be drawn taut, so that *firm pressure* will be made upon the affected part.

Usually four strips of adhesive plaster one inch wide and about sixteen inches long (if the carbuncle is seated upon the back of a grown person) will answer. They should be placed at about equal intervals, and two of them directly *over* the carbuncle. The proper method, however, will readily suggest itself to one who, in this treatment, is impressed with the necessity of producing *pressure*. The relief afforded the patient is usually very prompt. The plaster should be renewed daily, sometimes oftener if the fluids escaping from the surface of the carbuncle are abundant. When renewed, the exposed surface and adjacent parts should be thoroughly washed with tepid water and castile soap; at the same time any loose slough making its appearance may be removed by the dressing process. This latter will be required sooner by the method above mentioned than from any other which I have witnessed.

Healthy action, provided the constitutional means have succeeded, rapidly takes place, and as fast as the sloughs appear they are followed by healthy granulations. The carbuncle ceases to enlarge, and the callous periphery softens, the sloughing being confined mostly to the center and only extending down a little ways into the cribriform cavities. The usual undermining does not occur. The livid appearance disappears as well as the intolerance of touch, throbbing, tension and other distressing symptoms.

As cicatrization takes place, it may be assisted by dressings of terebinthinate and other ointments. The exuberant granulations, which are likely to follow, often require removal by the scissors and penciling with a crayon of nitrate of silver.

Medical Societies.

Obstetrical Society of London.

DR. HALL DAVIS, PRESIDENT.

PUERPERAL TEMPERATURES.—A PAPER BY MR. SQUIRE.

The author commenced by remarking that it was to the careful study of the natural history of disease that medical science owed much of its recent progress, and that some of its surest advances had been guided by the systematic use of the thermometer in marking the variations of bodily temperature. The study of such variations, as illustrative of the changes that take place in pregnancy, in parturition, and in the puerperal state, was the subject of the present paper.

In the latter months of pregnancy the temperature of the body is somewhat increased, and, after the sixth month, it will generally be found to be somewhat over 99° , subject to a slight variation in different persons, and in the same person under different conditions. In the unimpregnated condition much greater oscillations of temperature occur in connection with the catamenial period than at any time during pregnancy. Thus on the occurrence of the catamenia there is a considerable fall in temperature, and a variable rise shortly before, the temperature having been raised as much as one degree, and one degree and a half in some cases just before the period; and in one case a fall of two degrees and a half took place within the first two days after its appearance. The difference between the vaginal and axillary temperatures will seldom be more than one-third of a degree, and frequently only one-fifth or one-tenth; if in the latter situation, all the requisite precautions to secure accuracy are observed. In this way 98.45° was obtained as the nominal temperature in the axilla, and 98.75° in the vagina, when there were no disturbing circumstances. In three of the twelve cases taken for analysis in the present paper, where the comparison was made with the view of obviating some of the sources of error that might arise in investigations of this kind, the following results were obtained: In one case, where, on the second day from delivery, the axillary temperature was 98.3° , some pain be-

ing complained of from slight perineal fissure, the local temperature was found to be only 98.5° . The next day there was a sudden rise in the axillary temperature to 103.3° , with much fulness and heat of the breasts; and although the perineal tenderness had disappeared, the temperature there was 103.7° . In a second case of perineal fissure, the cicatrisation of which was complete on the ninth day, the temperatures were 98.2° and 98.3° respectively. In a third case, in which this comparison was made five hours after delivery, the temperatures were 92.2° and 99.4° respectively.

The observations of puerperal temperature, except in these bulb instances, are all taken as in ordinary illness, by placing the special of the thermometer in the axilla, care being taken to secure its contact with both surfaces of the skin, to maintain this contact perfectly for a sufficient time (which should not be less than three minutes), and to guard against loss of heat evaporation from the surface or through insufficient covering. There is not only no difficulty, but considerable convenience, in carrying out this method of noting progress during the lying-in state; the time occupied in other necessary inquiries suffices for obtaining these indications, which, when satisfactory, save further trouble and anxiety, or, on the other hand, give timely warning that precautions are needed. The commotion and efforts of parturition itself, while confined within the limits of natural labor, caused but a slight elevation of temperature, however great the sensation of heat may be either to the patient or the observer; indeed, in the axilla the thermometer will seldom reach its usual height. In the cases examined, the highest reading of a thermometer used in the ordinary digital examinations was 99.9° ; the lowest series in any case had only a range from 98.9° to 99.1° . In four cases the temperature was above 99° five or six hours after delivery, and in one case it was 99.5° twelve hours after delivery. The elevation of temperature thus occasioned immediately after delivery has invariably experienced a continuous decline; and in most cases, if not in all, the temperature has not only descended to the normal line, but in some cases it has gone considerably below it. This subsidence always takes place in the first twenty-four hours; it may be complete in twelve hours, or it may be prolonged into the second day. The lowest point reached in any case was 98.6° . The most constant and obvious disturbance of temperature in all the cases investigated is the rise which ushers

in and accompanies the formation of milk. The commencement of this re-action is most regular, and it attains a certain prominence forty-eight hours after the birth of the child. When the secretion of milk is readily established the temperature again undergoes a fall as sudden as the rise, which seems necessary to its formation. The period of this subsidence is most variable, and the aberrations which the line of temperature presents before it finally falls into the normal line fully warrant the care and attention at this time traditionally conceded. Of the twelve cases tabulated, three were primiparae; in three chloroform was given; three were in every respect normal; and three were complicated; the complications being, in one case, convulsions before delivery; in another, breech presentation; and in the third, a cross presentation; necessitating version, and this case was also one of twins. In one case, lactation was avoided; all the others suckled their children during the whole time they were under observations. The highest temperature reached was 104.3° on the tenth day; on the thirteenth day it fell three degrees, and soon became normal. In this case, there was healthy action of kidneys, skin, and bowels, and the secretion of milk was abundant. In two other cases until the fifteenth day the temperature continued somewhat above the normal line; in all the other cases it had become steady at this line before the ninth day, and in some in which this line had been reached on the third or fourth day there was a tendency to undue depression. In the patient who did not suckle, the first rise in temperature was less sudden and the subsidence more gradual, and it was not at any time so high as in the other cases. To obviate sources of error due to diurnal variations of temperature, observations were taken in the majority of cases between nine and ten o'clock, both morning and evening, until the fifth day; at noon on many of these days, and in the afternoon on subsequent days. These all show a steady progression in the direction indicated; and although an oscillation is shown daily, or on alternate days, in some of the higher temperatures, it is not until the puerperal state is nearly over, and convalescence well advanced, that the ordinary diurnal variations again become evident.

In reviewing the influence of sleep, food, stimulants and medicine, on the thermometric phenomena presented by the cases examined, it would seem that the first subsidence of temperature is chiefly favored by sleep; that in this way the time of delivery, if

happening in the later hours of the day, had an influence; that it followed sooner upon a labor of some duration than upon the more rapid, and also where there had been a slight hemorrhage and no coagula remained. That during the period of low temperature, aid is best afforded by sleep, solid food, and warm diuents, and not by alcoholic stimulants. That aperients are not advisable in the first forty-eight hours of the delivery, as, during that period, they tend to check the formation of milk, and consequently delay the lowering of temperature; their actions is more serviceable in the complications than in the ordinary requirements of the puerperal state. The disturbance of the pelvic viscera during parturition interferes with the natural action of the bowels, so that enemata are required especially in those cases where solid food was freely taken from the first. That the judicious use of alcoholic stimulants have a most marked influence during the puerperal state. In the relations of this to the indications of the thermometer, three rules are provisionally offered. 1. That while the temperature continues high and the secretion of milk is not fully established, stimulants may be useful and even necessary. 2. That when the secretion of milk is free, and the temperature still high, stimulants are unnecessary and may be injurious. 3. That when the temperature has fallen and the secretion of milk is free, stimulants are safe and necessary adjuncts to food. Practically this last conclusion alone is of considerable convenience, and when these conditions occur the patient can generally be left with safety. In none of the cases were alcoholic stimulants given during the first three days, and, in the case where suckling was not attempted they were abstained from altogether. The conclusions which may fairly be deduced from the facts here given, are—1st. That natural labor is not attended by any great exaltation of the temperature of the body. 2nd. That after labor there is always a fall in temperature. 3rd. That there is a subsequent rise in temperature, which has for its natural termination the secretion of milk. 4th. That observations of this kind are desirable as illustrative of the principles that should guide us in the management of the puerperal state.

Dr. Wiltshire said he was glad that the attention of the Society had been drawn to the subject, from which he believed important information would be derived; but he demurred to Mr. Squire's conclusions as being based upon such a small number of cases.

He referred to the observations already made by Dr. Von Grunewaldt, of St. Petersburg, upon 432 cases, and to observations made by himself on twenty-four cases during the latter months of last year. In some of these cases the temperature, as taken in the axilla, was actually below the normal standard, and the difficulty in arriving at a satisfactory conclusion respecting the normal variations of temperature was very considerable. On the whole, his observations agreed with those of Von Grunewaldt and Wunderlich (whom Von Grunewaldt quotes), as giving a mean of 98° F. as the temperature of lying-in women. Dr. Wiltshire then referred to the absence from Mr. Squire's paper of any notice of the ratio of the pulse and respiration, and of the influence of operative procedures. In his twenty-four cases, three were forceps cases, one a breech, one a footling case, and in one labor was complicated by an ovarian tumor, and the patient died five weeks after delivery. In this case after the third day the temperature was never below 101°.

Dr. Graily Hewitt considered the observations of Mr. Squire of the highest value and importance. Doubtless further observations would be made by others, but so far the results obtained afforded valuable indications. He was particularly interested in the question of the diet of child-bed, and Mr. Squire's results afforded confirmation of a point he had always strongly contended for—viz., the necessity for administering nourishment and food in good quantity immediately after the labor; for when such support was not given the temperature rose to an unnatural height, and the return to the normal temperature was impeded and retarded in proportion. The positive data obtainable by the thermometer would, he believed, prove exceedingly valuable as indications for treatment, just as Mr. Squire had pointed out. In one point he would venture to differ from Mr. Squire—as to the nature of milk abscess. He believed that milk abscess arose always from milk retention, and that high temperature connected with milk abscess did not indicate therefore inflammation of the breast.

Dr. Sansom thought the paper of great value and interest. He did not think, with one of the preceding speakers, that, in such an investigation as this, conclusions were valueless unless founded on a large number of observations. In the study of temperature it was more valuable to follow each case *per se*, and rather to investigate the causes which led to an increase or decrease of

temperature, than to strike a mean from a number of observations and endeavor to fix the line of what shall be called a normal or an abnormal state. This was illustrated by the author's diagrams, which showed that what is the natural temperature in one case is not so in another; and collateral observations showed in each instance fair reasons for the variations. It was strange that no rise of temperature should be noted during the stages of labor; for the production of heat was a necessary corollary from the physical conditions. Where there is inordinate muscular action, there must be an increase of heat; though it does not follow that this must be necessarily detected. The debasement of temperature, uniform in all or nearly all the cases on the second day, was an interesting fact, corroborating *a priori* reasonings.

After a few remarks from Mr. Haviland,

Mr. Squire replied, and, in answer to the objections of Dr. Wiltshire, stated that the ratio of the pulse and respiration was noted in the records of each case. In the one with an unusually high temperature, while this was at 102° and 103°, the respiration was not accelerated (it was 18 and 19 in the minute), and the pulse but slightly accelerated (98 to 116). Again, though more numerous cases might be obtained in a lying-in hospital, there was an advantage in examining cases where all the conditions are known, where the previous health had been under observation, and where the hygienic conditions were unexceptionable. Agreeing with the remarks of Dr. Hewitt as to the mode of production of milk abscess, yet the way in which the milk ducts were obstructed had to be considered. This might be occasioned by inflammatory action outside the glandular structures, or by fibrinous exudation from the interior of a duct. Early indications of these dangers were given by the thermometer. In one of the cases, a sudden rise on the twelfth day led to the discovery of a blush of redness under the left breast, which otherwise might not have been noticed until too late to obviate its consequences; and, in two other instances, by attention to the indications of the thermometer and the rules adopted, patients have been able to nurse well who on previous occasions had suffered from abscess in the breast. With respect to Dr. Sansom's observations, it was certain that though there might be a great amount of heat given off during the exertions of the second stage of labor, there was no great elevation of the general temperature of the body. In conclusion, Mr. Squire would remark, that did these observations do

no more than indicate to the practitioner which of the cases under his care required watching, and which could be safely left without a visit on days when engagements were pressing, this would be a sufficient equivalent for the time spent in making them; while to the patient they were never irksome, but rather afforded her a sense of satisfaction.

ON THE DEFECTS OF ORDINARY SPONGE TENTS ; WITH AN ACCOUNT
OF A NEW KIND OF CARBOLISED SPONGE TENT.

By ROBERT ELLIS, Surgeon to the Chelsea and Belgrave Dispensary.

The author, after advertizing to the serious inconveniences and occasional danger incident to the use of the common sponge tents, proceeded to describe a new kind introduced by himself under the name of carbolised sponge tent. In this invention sponge is still retained as the dilating agent, but the tent is prepared by a peculiar process which renders it incapable of putrefaction, without diminishing its value as a dilator. This is accomplished by introducing into the core of the tent several threads of cotton wick steeped in carbolic acid; and after the sponge is rolled into its proper shape, it is then immersed in cocoa butter to which a certain quantity of glacial carbolic acid is added. The disinfectant properties of this agent completely protect the tents, and they are withdrawn in an inodorous state even after a stay of twelve or eighteen hours in the cervical canal. The shape and size of these sponge tents also differ from the ordinary kind, which are both clumsy and dangerous, as well as disgusting, in their use. These are spindle-shaped, and thus accurately adapt themselves to the fusiform character of the canal which they are intended to dilate. They require no support when *in situ*, but, by virtue of the immediate fusion of the enveloping material, they take to their work immediately, and are firmly kept in position. The author stated that he had a large experience of their utility and value; and that they could be procured, ready for use, from Messrs. Bradley.

Mr. Ellis also exhibited an introducer for sponge tents. This instrument consists simply of a slender uterine sound tapered to a fine point, which is thrust up into the tent. A short distance from its extremity a small, flat, metal collar is attached, on which the sponge tent rests, so as to be firmly supported while it is pressed into its place. Mr. Ellis spoke in high terms of the great handiness of this contrivance, which may be obtained of Messrs Meyer and Meltzer.—*London Lancet.*

Commercial Hospital.

Service of Prof. H. E. FOOTE.—Reported by DR. A. GUTHRIE, Assistant Resident Physician.

Phagedenic Chancres Treated with Carbolic Acid in Commercial Hospital.

CASE FIRST.—S. B——, aet. 28, cook. Admitted 3d October, 1867. One month since contracted present disease, which first appeared as a small ulcer just behind corona glandis, near frenum, and gradually increased to its present dimensions.

Condition on Admission.—Medium size, organic functions normal, has an ulcer about the size of a three cent piece in above mentioned site. The whole tissue of prepuce in proximity to the ulcer is very much thickened and indurated, elevating the ulcer upon its summit. The ulcer itself is deeply excavated, and is discharging a small quantity of pus. Inguinal ganglia swollen and painful. Ordered to apply equal parts of calomel and sub. nit. bismuth to ulcer.

8th. The ulcer has assumed a phagedenic character, excavating the prepuce largely, which is much swollen and infiltrated and very angry. Ordered Ferri. et Potas. Tart. grs. xv, ter in die; also a lotion of same (3*i* to the 3*i*,) to be applied freely to ulcer.

14th. Ulcer is still spreading, having extending half around the prepuce and dipped down one-fourth inch in depth. To apply a saturated sol. Potassi. Permanganant, ter in die, and dress the ulcer with sol. of same (grs. xx to the 3*i*,) in interim.

24th. Ulceration continues to extend; ordered acid carbolic gtt xx; glycerinæ, aquæ aa 3ss; ft. sol. Sig; apply on lint three times a day.

Nov. 4th. Ulceration has entirely ceased to extend; no change in treatment.

6th. Ulcer is beginning to granulate nicely; treatment continued.

21st. Discharged cured.

CASE SECOND.—A. B——, aet. 22, glazier. Admitted October 17, 1867. Contracted present disease two months ago.

Condition on Admission.—General health fair; has an ulcer on penis, near prepuce, three-fourths of an inch in diameter, the sur-

face of which is unhealthy, and the base but little indurated. Inguinal glands engorged. To apply to ulcer, by means of lint, a saturated sol. Potas. Permeng. three times daily.

21st. The pains, and apparently, also, the inflammation and suppuration having been greatly increased by the above application, the strength of it was diminished one-half to-day.

24th. No improvement. Ordered ferri et potas. tart. in ʒi doses ter in die; also a lotion of same (grs. xv. to the ʒi), as local application.

26th. Ulcer continues to extend. Ordered acid carbolic gtt, xx, to ʒi, to be applied on lint.

29th. No decided improvement. To have carbolic acid, full strength, applied to ulcer daily, and continue above application in the meantime.

Nov. 2d. Ulcer has ceased to spread. Subsequent to this the pure carbolic acid was only applied occasionally, and then only to those parts of the ulcer which seemed least inclined to heal; but the above-mentioned sol. was continued throughout the course of the disease.

Dec. 9th. Discharged cured.

CASE THIRD.—P. R.—, at. 30, laborer. Admitted October 31, 1867. One month ago first noticed a small sore just behind corona glandis.

Condition on Admission.—General health fair; has an ulcer in above mentioned site, which extends from median line on dorsum to the frenum; there is slight suppuration, but little induration of base. To apply aromatic wine and water, equal parts, several times a day.

Nov. 2. No improvement. To dress ulcer with liquor sodæ chlor. two parts, to water one part.

7th. No change in condition. To have whole surface of ulcer touched with pure carbolic acid, and continue the above application.

11th. Ulcer is of much healthier appearance; above sol. liq. sodæ chlor. continued; only those parts of ulcer which seem least inclined to heal are to be touched with carbolic acid.

29th. Discharged cured.

It is, perhaps, needless to add that the general health of all these patients, especially the first two, was assiduously attended to and supported.

With reference to the first case, it will be observed that at least

two of the reported remedies had been pretty thoroughly tried without the least success, and, as a *dernier resort*, the application of the actual cautery was held in contemplation, when, happily for the patient, Prof. Foote suggested a trial of the carbolic acid, knowing that it had been decidedly beneficial in the treatment of other ill-conditioned ulcers, and therefore, had reason to hope that it might be serviceable in this class of ulcers also. In the second case the success of the remedy is hardly less remarkable. As to the third case, it scarcely amounted to more than a severe and extensive chancroid, but still the success was all that could be desired.

As neither of these patients ever returned, we may hope that the cure was permanent.

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

From the Royal London Ophthalmic Hospital Reports, Vol. VI, Part I.

Mr. Wilson on Diseases of the Eye in Cerebro-Spinal Meningitis.

Dublin Quarterly Journal, May 1867.

Selected by A. D. WILLIAMS, M. D., Cincinnati.

"MR. WILSON records his experience of eye complications in connection with the cases of cerebro-spinal meningitis which have lately been common in Ireland. Five cases are detailed, in four of which the right eye was the only one affected, while in the fifth both suffered. Mr. Wilson distinguishes several different elements in the disease as far as the eye is concerned. The worst is a general effusive inflammation of the globe, cornea, iris, choroid, retina, etc., while in less severe cases the conjunctiva, or the conjunctiva together with the cornea, may be the parts chiefly affected. Proptosis and lagophthalmos appear to be frequent, and to be due, sometimes, to swelling of the orbital cellular tissue, sometimes to spasm of the levator, or partial paralysis of the orbicularis. In some, the inflammation of the cornea, etc., seems

to be consequent, as in cholera, etc., to exposure of the front of the eye, but in others it is not so. In the cases of panophthalmitis chemosis and hypopyon are usually present, and deep ulcers in the cornea may form. The occurrence of petechial spots is mentioned in connection with most of the cases.

Some of the eyes seem to have been saved under very unpromising conditions. Mr. Wilson strongly urges the use of atropine locally, and considering that the eye disease is a result of general blood poisoning, leaves the constitutional treatment to the physician. Mercury and iodides appear to have been used in most cases.

As regards the stage of the disease at which the eye complication occurs, it would appear to be from the third to the seventh day.

Mr. Wilson adds that "amaurosis is not an uncommon sequence of cerebro-spinal meningitis." He attributes it to changes within the skull, but says nothing as to the presence or absence of optic neuritis. It would be very interesting to have further information on this point. The subject is a very important one."

REMARKS.—It would be highly interesting to know why the right eye only should be affected in four of the cases reported. It is reasonable to suppose, that if the eye trouble is the result of the constitutional disease, both eyes would be similarly involved, which was true only in one of the five reported cases. It is probable that the different affections of the eye in such cases are caused by exposure to the atmosphere. Patients are frequently unable to close their eyes, either on account of paralysis, or because they are unconscious and consequently do not know that their eyes are being constantly irritated by exposure to the air.

Every physician knows that in very advanced stages of typhoid fever, the eyes are inflamed, and the cornea ulcerated in consequence of the same exposure, because the patient is in a semi-comatose condition, and is, therefore, unable to keep them closed. Ulceration of the cornea is generally the result of such irritation.

A short time since an Irishman pitched down stairs, injured the base of the brain, paralyzed the right ear and right side of his face, together with the orbicularis of that side. He could not close the eye. In a short time the eye inflamed, and, after suffering for two or three weeks, he came for advice. He had acute keratitis, and inwards where the eye was most exposed, a large ulcer was developed in the cornea. The aqueous humor was

already turbid and a disposition to iritis was quite evident. All of this was without doubt the result of constant atmospheric irritation. In this case there could have been no *blood poison*, or *anything else* to have accounted for the eye trouble.

So we think that diseases of the eye in *cerebro-spinal meningitis* may be satisfactorily explained, and not specially on account of any constitutional or blood poisoning. We do not, however, deny their existence, but simply claim that they are not the immediate cause of the ophthalmia now under consideration.

It is quite certain that *amaurosis* following this disease is the result of intra-cranial causes. We frequently have occasion to examine persons blind from such disease, and find that they nearly always have what we call *white atrophy* of the optic nerves. This is supposed to be the result of intra-cranial inflammation and pressure, involving at some point the optic track. This atrophy, of course, is incurable. The treatment of the inflammatory affections of the eye, in all such cases, is very simple, and is based upon their direct cause as explained above. In the Irishman's case, the lids were closed and held so by means of compresses, with a bandage placed over them and tied around the head. In addition he was directed to untie the eye about three times a day, bathe it in warm water for some time, drop in a solution of atropine, and then tie it up again. This treatment has been kept up for several days, and the eye has improved nicely from the start. To-day the ulcer seems to be healing rapidly, the redness is fast disappearing, and the patient has had no pain of consequence from the beginning. And this, we are disposed to think, is the most rational treatment in all these cases of inflammatory ophthalmia in connection with or complicating "*spotted fever.*"

A. D. W.

*Selections from the Proceedings of the Ophthalmological Congress,
held in Paris, in August of last year. Translated from the
Klinische Monatsblatter fur Augenheilkunde, V. Volume.*

BY A. D. WILLIAMS, M. D., Cincinnati.

GRÆFE recommends the section of the optic nerve, which he formerly incorrectly advised for the prevention of sympathetic

ophthalmia, to relieve the flashing light and fiery appearances in eyes blind from certain diseases; as, for instance, after retinal detachment or irido-choroiditis with calcification of the lens. He communicates, also, an impressive case, in which hallucinations of vision appeared together with the paroxysms of flashes of light.

Likewise, he recommends a section, a cutting through, of the optic nerves by intra-ocular tumors, as a previous operation to the enucleation. A long stick of the optic nerve should be removed far behind its entrance into the eye-balls, and thus secure the patient against a return of the disease in the optic trunk, as experience teaches that the optic nerve is the frequent conductor of the affection back into the apex of the orbit.

The distinguished Professor would prevent this danger, by cutting away a portion of the optic nerve long before the enucleation of the balls is necessary, in consequence of the severe suffering. No person would consent to enucleation before the pain becomes really unbearable. In such cases, Graefe advises the above operation, in order to secure, as far as possible, the patient's safety. Of course, he refers here only to malignant growths that are often developed within the eye. If such an operation is made at all, it should be made quite early.

A. D. W.

How Graefe gets the Lens out at present in his Modified Linear Extraction.

Finally, the same speaker passes on to the consideration of several points concerning the extraction of the lens, and assures us that he (after the incision is made) works out all kinds of cataracts, at present, without the use or introduction of any traction instruments whatever. He does not press any more as formerly (slipping manoeuvre) the upper margin of wound inward, and thus allows the lens to escape, but now uses a hard rubber scoop, which causes no pain when it touches the sclerotic, and very little when it glides over the cornea. He lays the convex surface of this scoop upon the lower corneal margin, presses gently upon it and thereby makes the wound open so that the edge of the cataract may engage in it. He makes this a little more certain by pressing the upper margin of the scoop a little firmer than the lower, and by a very gentle shoving upward, makes the lens, by its margin, engage in the wound.

When the margin of the lens once gets into the wound, the direction of the scoop is changed from tending toward the center of the eye, more toward a tangent, and made to follow up the lens as it passes out through the incision. As the cataract escapes, the incision will be as nicely filled by it as though the former was made to fit into the latter. In this way a large part of the vis expellens does not go to increase the intra-ocular tension, as is the case in the *slipping manœuvre*, which was his former practice. This is the reason why, by his present manœuvre, the escape of vitreous is much less frequent. In two hundred and thirty cases operated upon, according to this modification, the vitreous prolapsed not more than three or four times.

Finally, is it to be mentioned that this modification succeeds well in all forms, consistencies and stages of cataract formation? Also, that hereby the whole operation is very much simplified, and that the chief objection to the former method, that traction instruments must occasionally be used, is done away with. It approaches the delivery of the lens in the flap extraction more than heretofore. By the present method it is never necessary to press from above downward in order to make the edge of the lens engage, as is often the case in the old flap operation.

The modification thus briefly described, is certainly a good one. We have often found it necessary, in the modified linear extraction, to use an ordinary scoop or cystatome in the way that he directs, at the same time the slipping manœuvre, as formerly advised, was employed. If the latter can be easily dispensed with, as Graefe now affirms, so much the better. We can readily understand why the vitreous should escape comparatively so seldom. In the first place, as formerly practiced, the pressure was made at the point where the vitreous is most exposed, and would naturally tend more to increase the intra-ocular tension. In the second place, as now advised and practiced, the pressure is made where the vitreous is least exposed, and just, as soon as the wound opens the lens slips into it and thus prevents the escape of vitreous, which is always an untoward symptom, and is to be avoided as much as possible.

Then the non-introduction of instruments into the eye, under any circumstances, is to be commended as one of the great advantages of the last modification. Introduction of instruments always does harm, and makes destructive inflammation more likely to follow.

A. D. W.

Diagnosis of Ophthalmia Neonatorum.

Easy as it is, it seems that physicians do not always recognize this disease. It is safe to call every *free purulent* discharge from the eyes of an infant of from three to five days old, ophthalmia neonatorum, and treat it as such. Other diseases accompanied with such a discharge are so rare, at such an early age, that we might say they do not exist at all. By correctly diagnosing such trouble in infants, and making a prognosis accordingly, would save physicians many a severe censure from parents. Only a few days since, a child five weeks old was brought to the office, suffering from this disease, and had been since the fourth or fifth day. The attending physician told the mother, all the time, that it was only *cold*, and that there was no danger, it would soon pass off and the child would be well. Upon examination, one of the child's eyes was found to be ulcerated, and will be seriously injured if not completely lost. This ophthalmia of children is a very dangerous disease, and should always be looked upon as such, and the parents should know it at an early hour. Other instances of the same kind frequently come under observation, and we refer to the matter here only to put medical men on their guard, that they may avoid such unpleasant things. Heaven knows that doctors get censures enough for things they can not help, and it is their own fault if they do not escape all they can.

A. D. W.

Correspondence.

Application of Anæsthetics.

EDITORS LANCET AND OBSERVER.—It is the object of this communication to mention a method of using chloroform, ether or chloric ether, that occurred to me some years ago, and that is the application of either of the above agents in the neighborhood of painful parts, as well as to the parts themselves. The above plan is original with me, and was adopted with decided success during a country practice of several years. At my suggestion it has been tried by a respectable dentist of our place,

Hillsboro, Ohio, in the extraction of teeth, and is most decidedly approved of by him. The plan is to drop on the vertex from ten to thirty drops; cover directly with a folded handkerchief, and, during the anaesthetic effect, the tooth can be drawn. Should the chloroform or ether cause a painful sense of heat, the cloth can be partially or wholly removed.

Might not this plan be worthy of trial in more serious operations? Could not the third stage, if not the fourth, of chloroform action of Dr. Snow and others, mentioned in Dr. Little's second edition of Therapeutics and Materia Medica be thus induced, and that without the "unconsciousness," and with greater safety in cases demanding medical or surgical aid?

Without desiring to trespass upon your valuable time, permit me to add that any comments you may feel disposed to make upon this article in your excellent journal might prove useful to our profession and humanity, as what is offered above may so do is my earnest wish. That your journal may continue to thrive is the additional wish of

Yours respectfully,

P. H. WEVER.

Registration Law.

EDITORS LANCET AND OBSERVER: Allow me to call the attention of your readers to the fact, that a law was passed, at the last session of the Legislature, requiring a registration of births and deaths to be made, quarterly, in the office of the Probate Court of each county. I have not as yet seen any allusion to the act in your pages, while it is an important one—important to physicians, who are especially required to report, and important to the State, for the returns made under such a law will be extremely valuable in many points of view. The statistics formed under it, will be of service to the medical writer, to the lawyer in regard to property, to the family in regard to persons. The law is a valuable one, a necessary one in a civilized community, and its provisions should be generally complied with; unless *generally* its returns will be useless. Judging from the county in which I reside, there does not seem to be a general compliance with it, either from ignorance or negligence. Not over one-half of the physicians practicing in the county have made returns. I, therefore, beg leave to call attention to the existence of the law, one in which physicians have a scientific interest, and I

doubt not that none, who are informed, will prove delinquent. At least, if they do, they will deserve the fate in store for all such in this region where the penalties of the law are to be enforced.

Yours,

MONTGOMERY.

Quackery.

RUTLAND, O., October 17, 1867.

EDITORS LANCET AND OBSERVER.—In the letter published in the October number of your journal, from the Newark, O., correspondent, exposing an instance of “bold-faced quackery”—an appeal is made for a law requiring all who practice the “art of healing” to have a diploma from a chartered institution.

Such a law is *greatly needed*. Its good effects would be beyond appreciation by all classes. I have conversed with many upon this subject. All, in and out of the profession, (except quacks) agree that it is really needed to protect not only the regular profession, but the *people* at large from the gross impositions practiced upon them by these *infamous* charlatans.

Instances like the following are not uncommon. One case came immediately beneath my observation, where one of these *fools* administered epsom salts daily, for four weeks to bring away the placenta after abortion had occurred.

Another fellow applied angle-worms to a child’s belly, to cure a hernia, saying ‘they would draw it together.’ Notwithstanding such ignorance, these man-slaying, misery-producers and *abortionists*, are much employed by the over credulous. They are numerous all over our land.

Let systematic appeals to our legislature be made by the medical press. Medical organizations, and petitions printed and circulated among the profession, especially, and intelligent men all over our State, and this very winter may find us under the *wholesome* protection of a law requiring graduation before being allowed to practice. Respectable practitioners of some years practice might well be allowed by passing a board of examiners. Why not move in this matter of such vast importance *at once*?

T. CURTIS SMITH, M. D.,
Late Surgeon 116th O. V. I.

Editor's Table.

ONCE MORE.—The old year is irrevocable; let us not trouble ourselves about that which can not be restored or attempted again, but with honesty of purpose, strive to employ the opportunities of a *new year*, in such manner that we shall not come up to its close with repeated vain and useless regrets. The past brings with it many useful lessons—it brings too, ever accumulating triumphs in all the affairs of life, in all that belongs to science, in all that concerns the good and progressive march of what we call society. What if in all the centuries of the past we have not reached those ends we are battling for! What if sickness and death still pervade the earth! Let us not, therefore, give up the struggle with disease. We have, in good measure, alleviated pain; we have cut short disease; we have presented many new remedies for the alleviation of human suffering. What a Christ-like mission is ours! With patience let us pursue our way; other triumphs await us; let us go forward and possess the goodly land.

As a journal of medicine, we shall still hope and labor for these things; still chronicle, with gladness, all that others are doing to advance the cause of our great and good calling. We have no promises to make. For many years we have steadfastly pursued the tenor of our way, and our measure of success, and the approving smile of friends is our grateful reward. A prominent medical gentleman, of central Illinois, writes to us as follows: "I have been an attentive reader of the *Lancet* for twenty years, and I am happy to be able to say that the volume for 1867 is *decidedly the best of the series.*" Such expressions we rarely print, but when we receive them we treasure them up as pleasant incentives, and work all the harder to deserve the compliment.

For the year 1868, upon which we now enter, we have only to say, that we hope to make a better and more useful journal than ever in the past. We have the promise of help to make it so; but after all, the fulfillment of much of all this rests with the friends of journalism in this great interior valley. Come up to our help then, and we are very sure that we shall work together to our mutual profit and pleasure. Without further preface then, and with no

pledges, except the past, we enter upon the silent drudgery of a new volume; but we enter upon it with much satisfaction, and extend to all our readers, new and old, the sincere compliments of the season—to one and all, a happy new year.

Regular Medicine and Homeopathy.

THE following letter, published in *The Evening Post* newspaper, gives the best and clearest explanation of the true issue in regard to homeopathy we have seen in print during the recent discussion of the matter. We, therefore, insert it entire:

"The attitude of the Academy of Medicine toward homeopathy and every other exclusive system of medicine, is very much misunderstood by the public. The regular school admits, most distinctly, that every remedy may be beneficial against some one or more diseases; and that it is the duty of the true physician to make himself acquainted with as many curative procedures as possible. The profession is broadly catholic, and accepts improvements from all quarters; but it is also necessarily somewhat conservative, and will not hastily abandon approved methods until it is sure that better have been found. It also imperatively demands that all so-called improvements shall be in accordance with common sense and good judgment; and while it cordially welcomes every real advance in every department of medicine and surgery, it determinedly resists all extremely revolutionary and completely subversive systems.

"Thus it must reject the extreme homeopathist with his one law of treatment and his excessively minute doses. For it knows that the law of similarities is only a partial, or even only an apparent truth; because a similar thing *differs* somewhat, as well as resembles a great deal; hence, a so-called homeopathic remedy acts somewhat differently from, or really allopathically to the disease it is given to cure. In the regular school, remedies are given which act either similarly, differently, or antagonistically to the action of the disease, just as experience and reason require; for this is merely giving medicines which act slightly greatly, or extremely different from the morbid action. It has no objection to the law of similarities as a partial truth, but rejects homeopathy when it claims to be the only true system of medicine. It rejects infinitesimal doses, because they are not only irrational in themselves, but are rejected by the major part

of the homeopathists also. The more rational of the homeopathists not only use doses which are not homœopathic, but they are also often obliged to fall back upon the remedies of the regular school in many cases of severe suffering and great danger. Hence, as many of the homeopathists use their medicines in all allopathetic ways, and use allopathic remedies besides, they must be rejected as long as they publicly claim that homœopathy is an universally true system of medicine. They are simply regarded as recreant allopathists. They get all their knowledge of anatomy, physiology, surgery, midwifery, etc., from the regular school, and a large portion of their *materia medica* and therapeutics, and merely use a few new or old remedies in a peculiar way. Whenever they condescend to use their own remedies in a rational and professional way, and give their allopathic doses and remedies without mystery or concealment, there will be no quarrel with the Academy of Medicine. Every new remedy which they may discover, every old remedy which they may use in novel and useful ways, will be honestly and carefully tested. The regular school already use many of the so-called homœopathic remedies far more scientifically and wisely than the homœopathists themselves. There is no illiberality against the use of any medicine which is brought forward in a frank, rational and professional way. There is the largest and broadest freedom for the use of any and every remedy which has simple and rational experience in its favor.—*Medical Gazette.*

Pleasant Drugs.

THERE seems to be a very honest difference of opinion as to the encouragement which the profession should give to unofficial preparations of medicine. At the last meeting of the American Medical Association, a very spirited discussion grew out of a resolution, presented by Dr. Hibbard, of Indiana, upon this very issue. That resolution proposed to decline the habit of using these preparations as "unscientific and imprudent, tending to demoralize the therapist, and to encourage irregular pharmaceutists and nostrum makers." It is true the exception was made, "*except where there is no officinal preparation that will answer the purpose as well.*" An exception, of course, that makes considerable of a loophole, nevertheless the meaning of the resolution we presume to be pretty well understood. It strikes us that the

tendency of such expressions of opinion, is, to say the least, exceedingly injudicious, and rather calculated to retard than advance the progress of a desirable state of the pharmacy.

Undoubtedly, irresponsible and incompetent pharmacists are liable to take advantage of the profession, and use it for the advancement of individual interests, by presenting compounds and formula of a worthless character. But quite as truly on the other hand, most valuable additions have been constantly making to our pharmacopœa, by stimulating the exertions and careful study of legitimate pharmacy.

Thus, for instance, as an agreeable substitute for the old official Huxham's tincture of cinchona, many physicians find the preparation known as the *elixir of cinchona*, a most happy and acceptable preparation. The serpentaria is omitted, and the proportion of cinchona not precisely the same; but instead of a disagreeable bitter tonic—we have a highly acceptable aromatic tincture. To be sure, our best authorities, Wood & Parish embrace the formula for the elixir in their works, but still they are not accepted as *officinal*. So, of a kindred character, are the several preparations which propose to afford a *ferrated* tincture of cinchona. These illustrate, as we think, the impropriety of ruling out preparations not yet accepted as *officinal*, but which are legitimate, and propose a desirable end, either in the therapeutic effect, or the acceptability to the stomach. Caswell, Hazard & Co., of New York, are, for instance, largely engaged in the manufacture of a combination of the pyrophosphate of iron, with a formula, essentially the Elixir of Cinchona. Their preparation is elegant, agreeable; if *truthfull* it is also a desirable combination. Many other pharmacists are engaged in like manner in experimenting with pharmaceutical combinations. In all these matters we are greatly in the power of the pharmacist; it is, therefore, of prime import to know something of his honor.

Take the pharmacopœa of ten years ago, and compare it with the last edition. It will be seen that quite a list of preparations have been dropped from the *officinal* list, and a large number added. This is simply the result of this sort of experiment, which we earnestly believe should be fostered and stimulated, rather than repelled by the regular profession—indeed the physician and pharmacist should co-operate. So long as it still seems necessary to resort to drugs in the curative therapeutics of

disease, let us more and more strive to present them in such form, or such disguise, as shall, to the least possible and consistent degree, prove disgusting to our patients.

PERSONAL.—Prof. Byford, of Chicago, leaves for Europe about the 1st of January, to be gone a six months' tour of travel and professional observation.

QUARTERLY JOURNAL of *Psychological Medicine and Medical Juris-prudence*.—We have received No. 3 of Dr. Hammond's new journal. It continues to be edited with ability, and the publishers take great pride in its mechanical appearance. Address Moorehead, Simpson & Bond, New York.

TO PUBLISHERS.—We respectfully suggest to publishers, societies, etc., that the Chairman of the Committee on American Medical Literature for the American Association is busy collecting material for his report, and those who desire new books, journals, transactions or the like duly noticed, should forward copies to Dr. Mendenhall, of Cincinnati.

THE *London Medical Times and Gazette* is published every Saturday, in London, as its name informs us. Kelly & Piet, Baltimore, have completed arrangements with the publishers of this popular weekly, to furnish it to subscribers in this country at a much less rate than has been charged for it since the war. It is an excellent periodical, and will be found of value to the profession.

PALMER'S ARTIFICIAL LIMBS.—It will be observed that Palmer takes a fresh start, and proposes to distance competition. Palmer is a fellow of infinite jest. He thinks that "on Palmer's legs you will all stand on a better footing, and make deeper 'foot-prints on the sand-hills' of the present time." * * * "The day may not be far distant when the saddle-bags of the country doctor will not be regarded as complete without a Palmer leg or arm." The fun he pokes at his rivals is funny, but we can't afford to repeat it.

SEVERAL LETTERS, together with other matter which should have appeared in the December number of this journal, were thrown out by oversight of the printer. This will explain the late appearance of some of the correspondence in this number.

LEGALIZED PROSTITUTION.—After writing the article on this subject, which appears under the head of communications, we notice in a report of the proceedings of the International Medical Convention, in Paris, that the registration and regulation of prostitution in that city were pronounced a failure, the clandestine prostitutes far outnumbering the registered. The licensing system, therefore, appears, in this instance, to impose no restraint either on the moral evil of prostitution, or on the physical evil of syphilis.

PENNSYLVANIA HOSPITAL REPORTS.—We have heretofore stated that an initial volume of reports of this old hospital was about to appear, but we did so on general rumor, not knowing the particulars. We are glad to learn that it will be issued from the press of Lindsay & Blakiston, about the 1st of January, and will be on the general plan and have the appearance of Guy's Hospital Reports. The price to subscribers will be \$4 a year, otherwise \$5. This same enterprising house will also issue, about this time, Bourchadat's Annual of Therapeutics, which has been translated and edited by M. J. De Rosset, of the University of Maryland. Such works can scarcely fail to command a large sale.

Miami Medical College—Summer Course of Instruction.

THERE will be the usual Course of Instruction given during the spring and summer months at the Miami Medical College. All of the Faculty participate in the Course, together with a number of competent gentlemen interested in medical teaching. The term will commence about the middle of March and continue until about the 1st of July. The plan of instruction comprehends reviews and oral examinations of the regular course, with special lectures on Diagnosis, Diseases of the Ear, Laryngoscopy, etc. Students will have opportunities for attendance on the Commercial Hospital; and the College Clinics are becoming of such importance as to afford a large amount of instructive material to the class. The hours for lectures each day will be such as to

afford students ample time to cultivate Practical Anatomy, as well as attend Hospitals and Clinics. We feel confident students will be amply repaid for the time by the increased facilities thus afforded for perfecting their course of medical studies. The fee for the course will be \$20. This course is regarded as supplemental to the regular winter session, and does not count toward graduation.

Introductory Address of Prof. Richardson, at the Opening of the Miami Medical College, for the Session of 1867-'68. Salutatory to the Class of the Medical College of Ohio, at the Opening of the Session of 1867-'68, by Prof. Gobrecht.

WE rarely find enough that is new in introductory to justify any special editorial notice, but we must express our thanks to Prof. Richardson and Prof. Gobrecht for the courtesy which has afforded us so much gratification as the perusal of their lectures introductory to their respective courses in the Miami and Ohio Colleges.

Prof. Richardson's theme, "The Science and Art of Medicine and the Obligations and Duties of the Physician," is by no means new, but he has treated it with freshness and interest.

Prof. Gobrecht gives us a real *Salutation*, discussing our profession, the opportunities for study, and the conduct of the correct student. Incidentally, he discusses also the exciting question of the medical education of woman, which we think he disposes of in a truthful and philosophical manner.

THE *Boston Medical Journal* has a very good recent editorial, at the same time justly rebuking our American disposition to unduly appreciate foreign authority and the excellence of foreign teachings, while he very truly points out our own steady contributions as a nation to the greater excellence of our profession :

"There are many in this country who are wont to swear by the words of foreign masters; who, to the sound advances of home growth, yield grudgingly a half-doubting assent until they have been approved abroad; who, to the utterances of native authors, though abundantly sustained by facts, grant but a tithe of the weight they would concede to them if imported from Paris or London. We know perfectly well that the immense hospitals

and extensive libraries of Europe have given our trans-Atlantic teachers the start of us in observation, erudition and scholasticism, and that we owe them a debt we have but just began to repay. But we need not, on that account, forget that, for practical tact, for the power of seizing the essential truth, while sifting out the unimportant, and for the shrewd interpretation of facts, the American mind is pre-eminent. Let us learn to appreciate and develope our originality. By the side of the literary excellence of the Philadelphia, and of the enterprise of the New York Schools of Medicine, we may call to mind the wise practical counsels of James Jackson; the self-limitation in disease of Bigelow; the teachings of Ware, as, for instance, upon the different kinds of so-called croup, and the treatment of the membranous form, without perturbation, and also upon the injurious effects of opium in delirium tremens; the pathological learning of John B. S. Jackson; the bold, yet careful and successful surgery of our hospitals, associated with names too prominent to need mention, recording, among other things, a method of curing vesico-vaginal fistula, quietly practiced in private wards, which anticipated what has been done elsewhere; the discovery of etherization, caught up and promulgated with prompt sagacity; the brilliant and authoritative physiology of Dalton, transplanted from Boston; the treatment of syphilitic iritis without mercury by Williams; the judicious recognition of the sway of Nature in Disease, not preceded, we believe, by Forbes in his famous articles in the *British and Foreign*; all these, and much more which might be mentioned, are as valuable as though they emanated from foreign sources.

"The war has emancipated public opinion and literature from subserviency to the old world. But American Physic has yet to declare its majority. We shall, of course, continue to examine what Europe has to offer us, but we should see it through our own spectacles."

Are We Threatened with Cholera Again?

DR. SNOW, of Rhode Island, has written an article for the *Providence Journal*, warning all sanitary authorities to continue precautions unabated. He says:

"There seems to be, at the present moment, far more indications of a general epidemic of cholera in 1868, than there was in

the autumn of 1865, of a general epidemic in 1866. Let us notice a few of the indications:

"The cholera has broken out in Havana, Cuba, and great excitement was caused thereby. Several hundred deaths have already occurred, and, at the last date, the disease continued and seemed to be on the increase.

"The cholera recently appeared on board a vessel at the Philadelphia Navy-Yard, and caused thirty or forty deaths in a few days.

"The cholera has recently broken out in one of the country parishes of Louisiana, and has caused a large mortality, which still continues.

"The weekly mortality reports of New Orleans, for the last three months, have shown more or less deaths from cholera, and the weekly number is now fast increasing. During the week ending November 10th, there were fifteen deaths from Asiatic cholera; during the week ending November 17th, there were fifty-six deaths, or one-fourth of the whole number from all causes; during the week ending November 24th, there were eighty-nine deaths from cholera, or more than one-third of all the deaths.

"There have been rumors of cholera in St. Louis the present season. The reports of the Board of Health of that city show no deaths from Asiatic cholera, but they give one hundred and seventy-three deaths in August, four hundred and three in September, and two hundred and seventy in October; a total of eight hundred and fifty-one deaths in three months from *cholera morbus*. This is clearly a distinction without a difference.

"One or two vessels have arrived at Quebec from Europe, with cases and deaths from cholera on the passage.

"Several vessels with cholera have arrived at New York, and the disease has existed for some time at the quarantine of that city.

"Sporadic cases of the disease have been seen in nearly all our cities the present season.

"Such are a few of the facts which have fallen under our notice within the last few weeks. What do they teach? As we understand them, they teach that the primary or epidemic cause of cholera—that cause which, having its origin in India, travels westward—exists and is present at this moment over a wide extent of the surface of the earth. It exists in some portions of

Europe—on the Atlantic Ocean—and on this continent, from New England to the Mississippi River, and to the West Indies, as well as in Central and South America. It is ready to produce its specific effects, whenever and wherever it finds the necessary conditions of temperature and impure air.

"In this portion of the country its effects are held in check by the cold, and will be during the winter. But in the West Indies and in New Orleans the disease will probably increase to a considerable extent, and on the approach of warm weather it will extend and increase in the Northern cities. In 1853, the year preceding the last general epidemic of cholera in this country, there were five hundred and ninety-four deaths from cholera in New Orleans, of which three hundred and thirty-two were in December. In the same year there was a severe epidemic of yellow fever in that city, causing seven thousand eight hundred and forty-nine deaths.

"During the present year, from the 1st of August to the 24th of November, there have been two hundred and fifty-one deaths from cholera and three thousand and forty-two from yellow fever, in New Orleans."

About the time the above was penned, an additional warning was given us in the arrival, at the port of New York, of the emigrant ship *Lord Brougham*, from Hamburg, with seventy-five deaths on board from cholera during the passage.

Our municipal authorities should be urged by the medical profession to put our cities in the best possible sanitary condition, so that if the cholera should visit us this year, we shall be, in a measure, at least, prepared for it.

Fluid Extracts.

THE attention of physicians has been turned of late to the general unreliability, and, sometimes, entire worthlessness of the fluid extracts in common use. This inefficiency may be due to the quality of the drug used, or the dishonesty of the manufacturer, but is in most cases, more probably, the result of the mode of preparation. The trouble seems to lie with those drugs whose medicinal effect depends on volatile principles, which would be evolved on application of even a low degree of heat.

Here then is the difficulty that the use of heat renders the extract valueless, because it deprives it of its only valuable ingre-

dient. To dispense then with this dangerous agent is the effort of every manufacturer.

Different makers have adopted different methods, involving the use, however, of more or less heat, but none have achieved the result desired, till Dr. Samuel P. Duffield, of Detroit, announced his process in which he avoids the use of any heat whatever. The following is a short description of this valuable improvement:

"The drug is ground to a coarse powder and placed dry in an iron cylinder. The air is then exhausted by means of an air pump, causing the pores of the drug to give up the air contained in them, and permit the entrance of the menstruum, which is forcibly sucked in through a syphon tube. The effect of this is to impregnate the menstruum with the entire soluble and medicinal properties of the drug, and thus rendering after concentration with the aid of heat unnecessary."

The theory of the above process seems clearly superior to others in use, and the practical workings of it, produce results as we would anticipate.

Many of our leading physicians, among whom we might mention Professors Weber and Scott, of Cleveland, Professor Armor, of Michigan University, Professor Hildreth, of Chicago, have tried fluid extracts made according to Dr. Duffield's process, by Duffield, Parke & Co., of Detroit, with a view to thoroughly test their merits, and have pronounced them decidedly superior to others in use.

In general appearance they differ much from the dark colored preparations to which we are accustomed. The standard is that of the U. S. Pharmacopœa, sixteen troy ounces of the drug to the fluid pint.

Abstracts and Selections.

SURGICAL.

Syphilis in the Lower Animals.

M. AUZIAS TURENNE has presented to the *Academie de Medecine* a final report on this subject. It is well known that he has for a long time been investigating the question of the susceptibility of the lower animals to inoculation, with the syphilitic poison, and has very positively asserted that such inoculation can be produced. The last number of the *Archives Generals de Medecine* contains the

conclusions arrived at in TURENNE's memoir. It should be stated, however, that these views are not yet accepted by the best syphiliographers, and that whenever the subject has been brought up in the academy, TURENNE's "unfortunate cat" has afforded occasion for no little merriment. At the conclusion of the reading of the report in question, RICORD objected strenuously to its conclusions, and maintained that thus far there had been no demonstrative evidence of constitutional syphilis in the lower animals, but in the cases reported as such, there was such a complication of morbid phenomena that it was impossible to come to any positive solution of the question; and, besides, the differential diagnosis in these cases was by no means well established. TURENNE's report was referred to a committee, consisting of MM. RICORD, BOULEY and GUERIN. We present the conclusions of TURENNE's paper, that our readers may see what is being done abroad by way of investigation of this interesting subject:

1. Certain of the lower animals—the monkey and the cat especially—can contract syphilis of different forms, either primary or consecutive.
2. The mucous membranes of these animals do not appear to be very favorable for the development of the syphilitic symptoms.
3. Nevertheless, the chancre and false chancre do develop on these mucous membranes.
4. I have seen on the lower lip of a cat, a large, slow growing tubercle, which was three times reproduced in precisely the same spot, and which, each time, was ulcerated. At the time of each re-appearance of this tubercle the cat was pregnant, and afterward gave birth to young which lived but a few days.
5. The primary symptoms in the monkey and the cat, are the chancre and false chancre.
6. I am in doubt whether these animals are susceptible of contracting syphilitic blenorragia.
7. Twice I have found roseola, once in the monkey and once in the cat.
8. Scattered eruptions of acne constitute a common and persistent symptom in the animals.
9. These eruptions present in the monkey, cat and rabbit, the same characteristics as in man, with only this difference, that while in man they are confined to the scalp and certain hairy portions of the body, in animals they are generally distributed over the whole body.

10. Alopecia is an undoubted symptom of syphilis in the monkey and the cat.
11. Mucous patches and onyxis are unquestionable manifestations of syphilis in animals.
12. It is true that animals are subject to rheumatoid pains, for under the influence of syphilis they become very sensitive to cold, and, sometimes, the movements of their limbs are interfered with.
13. The hair-bulbs and the scalp become the seat of pain in animals in certain cases of syphilis.
14. Circumscribed acne, syphilitic vegetations, gummy tumors and tubercles of the skin, have frequently been observed in the cat.
15. This animal is subject to osteoscopic pains and adenitis.
16. The cat, which is the subject of this paper, has a muscular tumor of a syphilitic nature.
17. Periostoses, and also exotoses, have been ascertained and proven in the cat.
18. A syphilitic cat, after giving birth to young infected with hereditary syphilis, becomes sterile.
19. From all these primitive and consecutive symptoms, we are able to say there is probably not a single one that will not spontaneously disappear. Each one has a beginning, a continuation, and a termination. This is not accidental, but a natural evolution which is accomplished. They are not arrested by treatment, but they yield spontaneously. The disease itself, in its various manifestations, has a beginning, a culmination, and an end.—*New York Medical Journal.*

Chancre Supervening upon Secondary Symptoms.

WE translate, from the *Union Medicale*, the following account of a case of chancre, occurring during the period of secondary symptoms. The case was reported by M. Michaud, *interne* of the Lourcine Hospital:

K., aged thirty-two years, married ten years, had four years ago a vaginal discharge, symptomatic of ulceration of the uterine neck. This year, toward the end of April, she discovered on the left labium quite a hard papule, which was probably an infecting chancre. On questioning her subsequently, the patient said she had had several papules consecutively, the number of which had

progressively augmented until the end of the month of June, during which period, according to her statement, she had seabs upon the scalp, and lost flesh.

The twenty-ninth of June, K. came to the Lourcine, and was seen by M. Despres, who found numerous mucous tubercles scattered over the whole mucous surface of the labia majora, and others at the margin of the anus; also clusters of enlarged indolent glands in both groins. Cauterizations with chloride of zinc—no mercury; tonic regimen. The twentieth of July, the patient came again for advice to M. Despres. The mucous tubercles were nearly cured; but on the lower lip there was an indurated chancre of the size of a small hazel-nut. The latter was developed in the following manner: Eight or ten days, after the patient first consulted M. Despres, she discovered, at the upper extremity of a crack in the upper lip, from which she had removed a scab the night before, a small swelling, which gradually increased in size and which scabbed anew. The twenty-seventh of July, the patient presented herself for the third time to M. Despres. At the vulva, the only traces of the mucous tubercles consisted in white spots on the mucous membrane of the labia majora. At the upper lip, the chancre had attained the size of a franc piece. The circular induration was well marked underneath a thin scab which covered the tumefaction. Sub-maxillary adenitis existed. Two ganglions are still swollen, and one in a state of indolent inflammation. A sub-hyoid ganglion was also enlarged, and is so st.ll. There was a mucous tubercle upon the right tonsil.

The twenty-second of August, this patient entered the Lourcine Hospital, during the service of M. Liegeois, when she wa subjected to mercurial treatment. The fifth of September, however, a few mucous tubercles had returned upon the labia majora

M. Liegeois, on the ground of the slightly marked glandular enlargement, and taking into consideration the usual course of syphilis, was inclined to think that the case was one of simple mucous tubercle, taking on a peculiar character from its seat, and from contact with the air. M. Despres, on the contrary, saw in this lesion all the indications of indurated chancre of the upper lip. In order to decide the question, this patient was to have been presented to the Academy of Medicine, the fourth of September; but the programme for the day having been very crowded, did not allow of it. Nevertheless, several Academicians, MM. Ricord, Gueneau de Mussy and Depaul, have seen her, and

have not hesitated to diagnosticate an indurated chancre of the lip. M. Ricord's only doubt was in regard to the anterior existence of mucous tubercles.

[The reporter of the case subjoins the following remarks:]

It can not be supposed that there were in one patient two indurated chancres resulting from two infections, incurred at the same epoch, since, at the appearance of the second chancre, there remained no appearance of the first. We have here a syphilitic re-infection, which may be likened to the artificial re-inoculations of Wallace, H. Lee, Diday, Sperino, etc., and to the natural re-infections observed by MM. Follin, Rodet and Diday. In a great number of these cases, and notably in the artificial re-inoculations, the indurated chancre of the second infection was remarked as showing a noteworthy diminution of the induration, ulceration and granular enlargement, to such a degree that the lesion was, in certain instances, only an aborted chancre. In our patient the indurated chancre is voluminous, the ulceration extensive, the induration well marked. Adenitis existed, but of moderate intensity.

On the other hand, though the experiment of the inoculation of syphilis has been successful in all the periods of its evolution, clinical observation has hitherto shown a considerable interval between two syphilitic attacks. Thus, in the patient of Diday, among whom the two infections were the least distance from each other, we find the interval to be twenty-two months on the average. In these cases, the subject presented no traces of the first infection, at the time of the second; and, according to M. Diday, re-infection demonstrated positively the cure of the first syphilis. In our patient, the indurated chancre of the lip showed itself, while the secondary symptoms were in full blast about two months and a half after the breaking out of the first infection.

Natural re-infection has given here a result not before observed, but of which artificial inoculations had demonstrated the possibility. We may, therefore, conclude, as Rollet says in his "Traité des maladies vénériennes," that the re-inoculability of syphilis is an exception, but that such exception may be observed in all periods of the disease; even at the commencement, and, consequently, long before the diathesis has been effaced.—*Boston Medical and Surgical Journal.*

Carbolic Acid in Surgery.

BY GEORGE DERBY, M. D., Surgeon to Boston City Hospital.

THE use of carbolic acid in surgery is based directly upon the investigations of M. Pasteur on putrefaction, in which he shows the relation of infusoria to the process. The result of his experiments, as published in the *Comptes Rendus* of the French Academy, and in the *Annales des Sciences Naturelles*, are briefly these: Putrefaction is fermentation. Fermentation is putrefaction. The process is one and the same, and in all cases determined by the presence of infusoria. They, in fact, are the true ferment. These infusoria are minutely described by Ehrenberg, and also by Pasteur. They are chiefly Vibrios and Bacteria. Pasteur says they resemble, in certain respects, plants rather than animals, and they may be regarded as among the most minute and imperfectly organized forms of life, whether of the animal or vegetable kingdom.

"Should these microscopic beings disappear from the globe, the surface of earth would be encumbered with dead organic material, and bodies of all sorts, animal and vegetable. Without them life would become impossible, since the work of death would be incomplete."

The above extract from Pasteur shows how far these ideas of putrefaction reach. They revolutionize the doctrine that the vital principle alone defends organic material from the destructive action of oxygen, and shows that neither air nor water can convert organized substances into simple elements. That process is due to infusoria.

These organic germs are everywhere present in the atmosphere. Pasteur found them on the Jura, at Montanvert, and at other great elevations, although in diminished numbers. In Paris every bubble of air contains myriads. In hospitals they particularly abound. It is certain that they exist in every place occupied by man.

The application of these ideas to practical surgery was first made by Mr. Lyster, a surgeon of Glasgow, and an account of his experiments has been recently published in the London *Lancet*. He sought to prevent decomposition of the fluids thrown out in cases of compound fracture. To do this, an agent was required sufficiently powerful to kill the infusoria already admitted by the external wound, and which should not be also destructive to the

tissues. Such an agent is found in carbolic acid. This he applies freely to all lacerated parts which have been exposed to the air, and then seals up the external wound with the same substance, claiming that by this process a compound fracture is converted into a simple one. Abscesses are also treated on the same principle, the access of infusoria to their interior being prevented by holding a cloth wet with carbolic acid in front of the abscess at the moment of making an incision.

It has occurred to the writer, that a simpler and more effectual way of securing this result would be by throwing a jet of carbolic acid spray from an atomizer upon the point of opening.

The following case, which, by itself, proves little, and yet may be regarded as a contribution to the history of this interesting question, was reported at the last meeting of the Boston Society for Medical Improvement.

September 21st, 1867. A boy, nine years old, was received at the Boston City Hospital, with compound fracture of the middle of the right thigh, having fallen from a tree three or four hours previous to admission. The external wound was on the anterior face of the thigh, and large enough to admit a finger, by which the ends of the broken bones could be touched. A good position was got by means of sand-bags and a five pound extension weight. A solution of carbolic acid in glycerine, equal parts, was then applied freely to the wound, all parts being touched which could be reached by a bit of sponge held with dressing forceps. No ether was used, and the application caused very little pain. The external wound was then covered with a piece of lint soaked in the same solution. On the following day, this was found to be firmly adherent to the adjacent skin. During the following four weeks this covering never became detached. Fresh pieces of lint soaked in carbolic acid were occasionally added to it, and the surface was daily moistened with the solution above named. A few drops of serum occasionally oozed from the edge of the lint, but not a drop of pus. At the end of four weeks the covering was removed, disclosing a round, superficial ulcer, half an inch in diameter, which, in a couple of days, was covered with a firm scab. There is now (October twenty-six) firm union of the bone. From the beginning to the end of this case, there has been no constitutional disturbance, and in every respect the patient's condition could not have been better had the fracture been simple.—*Boston Medical and Surgical Journal.*

Subcutaneous Incision in Carbuncle.

"I HAVE had several opportunities of seeing, at the Hospital St. Louis, in the service of M. Guerin, cases of Anthrax, more or less grave, treated by his method of subcutaneous incision. This proceeding counts many partisans among us. It consists in plunging in the center of the Anthrax a straight bistoury, which is immediately insinuated on the flat side under the skin beyond the limits of the swollen parts; and, as soon as the limit is passed, the cutting edge of the instrument is turned toward the deeper parts, to incise them from the circumference to the center, till the sensation felt indicates that resistance is overcome. This first incision only indicating one radius of the diseased surface, three others are made which converge toward it to the point at which the bistoury was introduced. When the integuments offer a mortified point, or an orifice, it can be used for introducing the instrument, without its being necessary to divide the skin to however slight an extent. The success of this operation, says Dr. Guerin, seems to solve the question of the seat of anthrax; for, if it be practiced at the outset of the malady, it arrests the march of it, and opposes the mortification of the skin. Often the cellular tissue suppurates, and is eliminated under the form of a "core;" while the skin presents no alteration. The subcutaneous incision of anthrax has the special advantage of relieving the patients from the liability to erysipelas and to purulent infection. Besides, this means is not very painful; for it spares the skin, which is of all the tissues that of which the incision produces the most pain. Finally, it does not give rise to a deformed cicatrix—a consideration which is not to be disdained when the anthrax is seated on the face, or any other uncovered part of the body. After the incision, emollient poultices are applied; and in all cases the cure occurs more quickly than by any other treatment."—*Paris Cor. British Med. Journal.*

OBSTETRICAL.

THE *Union Medicale* contains an account of a most remarkable case of uterine rupture, related by Dr. Chereau. The patient was already the mother of six children, and the accident occurred during the seventh accouchement. On this occasion, the first stage of the labor proceeded regularly, the uterine neck dilated well, but after the rupture of the amniotic pouch, a loop of the

umbilical cord escaped by the vulva. The sage femme was frightened and sent for Dr. Trossat, who tried in vain to replace the cord, and then counseled patience and waiting. The expulsive pains continued with excessive violence for an hour and a half; then the patient suddenly experienced a sensation in the belly as if something had given way, she became horribly pale, pulseless, and fainted. Upon exploring the vagina, the sage femme discovered, instead of the fetal head, a spongy mass, like a sort of magma. Recalled in great haste, M. Trossat discovered the following state of things: The abdomen was bilobed, presenting a marked depression in the center; the right hand, introduced into the vagina, penetrated into the abdominal cavity, and reached the left foot of the fetus; a large breach existed in the left side of the body of the uterus, and through this opening the fetus had in great part escaped into the peritonum, being placed, as it were, astride on the edges of the wound. The left foot was first withdrawn and maintained in place by a cord, then in succession the right foot and the arms were drawn into the uterus, and, finally, with a finger crooked into the mouth of the child, the skillful accoucheur was able to draw the entire body from the peritoneal cavity. The rest of the delivery was then effected with the greatest facility. But as soon as the uterus was disengaged of its contents, a mass of intestine escaped by the breach. Four times the intestine was pushed back into place, and four times it re-appeared between the thighs. Finally, the patient was placed in an inclined position, with the basin elevated and the head much lower, and by this means the intestines were retained in place.

Of course, a frightful peritonitis ensued, which continued five weeks. Nevertheless, the patient recovered completely, the menses were re-established at the end of sixteen months, and four years later the woman was confined for the eighth time, and in perfect safety.

M. Laforgue, of Toulouse, has made some researches on the subject of the accouchement of epileptic women, and has arrived at certain conclusions different from those generally held. In the case of the women whose attacks had continued, sometimes with great violence throughout the pregnancy, the travail of childbirth was entirely free from any symptoms of convulsions, and the children were born alive and healthy. M. Laforgue, basing himself on an analysis of these facts, infers that eclampsia

and epilepsy are really antagonistic, instead of mutually predisposing to each other, and that there is less to apprehend in the accouchement of epileptic patients, than of others with only a general tendency to nervous disease.

MATERIA MEDICA.

Bromides of Potassium and Ammonium.

DR. SABIN, of West Troy, New York, makes the following note on the use of these agents, in the *Boston Journal of Chemistry*:

I have used them both, and, like ammonia, much the best, for the reason it is a stimulant, while that of potassium is a sedative; and in most cases of nervous wakefulness, there is great debility attending it, requiring stimulants and tonics instead of sedatives. Both will, in most cases, cause sleep; but with potassium the sleep will be followed with great prostration and languor, while with ammonia the patients are strengthened and refreshed.

The following case will illustrate:

Mrs. W., aged forty-five, of a nervous lymphatic temperament, after the death of a very promising son of fourteen years, sank into a condition of nervous prostration; no desire for food; was able to sit up or lie on the lounge; said she was not sick, but could not eat or sleep; had no pain. After trying opium, morphia, valerian, hyoscyamus, etc., without any beneficial results, I gave bromide of ammonium in sixteen-grain doses, on going to bed, which made her sleep, feeling the next morning very much refreshed. This was continued several days, with the same beneficial result. After she had taken it some days, at the suggestion of a neighboring physician, I gave her the bromide of potassium as follows:

R.—Bromide of Potassium, $\frac{3}{4}$ i.
Water, f. $\frac{3}{4}$ iv.

Dose: Tablespoonful three times a day. This took away all her life and ambition; it caused general languor and great feeling of prostration, which, I fear, had it been continued, might have proved fatal. I changed back to the ammonia with good results, and had the satisfaction of seeing my patient, in a few days, able to take a journey to the sea shore.

In a case of delirium tremens in a woman, where she had not slept for several nights, after trying opium with no sleep, I gave the ammonia, which made her sleep, waking refreshed, and she soon recovered.

CINCINNATI, December 24, 1867.

EDITORS LANCET AND OBSERVER:—Having been appointed by the Academy of Medicine, of Cincinnati, to prepare a memoir of the "life and character" of the late Dr. J. P. Judkins, I take advantage of your widely circulated journal, to request contributions from all who may have items of interest in reference to our late professional brother.

Truly yours,

P. O. Box. 2,446.

J. F. WHITE, M. I.

Reviews and Notices of Books.

Clinical Lectures on the Principles and Practice of Medicine. By JOHN HUGHES BENNETT, M. D., F. R. S. E., Professor of the Institutes of Medicine and Senior Professor of Clinical Medicine in the University of Edinburg, etc. Fifth American, from the Fourth London Edition, with five hundred and thirty-seven Illustrations on Wood. New York: William Wood & Co., 1867.

We need scarcely say that the name of John Hughes Bennett has become, to a great degree, representative in medicine; and the work before us, expounding his peculiar views, has already come to be ranked amongst the classical literature of our profession.

In this present American edition, we find several important additions that will be acceptable to the working practitioner. Thus we notice all the new modes of exploring affections of the throat, the use of laryngoscope; all that portion of the book devoted to the examination of the patient, being delightfully illustrated with most excellent wood cut engravings.

Dr. Bennett's peculiar views on pathology are pretty well known to the profession, though very often misquoted and badly represented, they have made their impress upon the professional thought of the age, and, for good or ill, will materially influence us in our practical views and conduct. Beyond these brief remarks, calling attention to this new and important edition, we need scarcely go. The Publishers have done their part well, and readers will peruse the work with eagerness and pleasure.

Inhalation. Its Therapeutics and Practice. A treatise on the Inhalation of Gases, Vapors, Nebulized Fluids and Powders, including a description of the apparatus employed, and a record of numerous experiments, physiological and pathological, with cases. By J. SOLIS COHEN, M. D. Illustrated. Philadelphia: Lindsay & Blakiston, 1867.

THE therapeutics of which this little volume treats are just now attracting unusual attention and favorable regard from the profession. Dr. Cohen has been giving the subject a good deal of attention, and has prepared a good little book, embracing about all that is known. We think too it is especially useful an account of the numerous cases which have been accumulated, in the observation of the author, and gathered from a great variety of other sources. For sale by Geo. S. Blanchard & Co. Price \$2 50.

Headaches, their Causes and their Cures. By HENRY G. WRIGHT, M. D. From its Fourth London Edition. Philadelphia: Lindsay & Blakiston, 1867.

This little book on *headaches* has been favorably known to the profession heretofore, and a new edition will be welcome to our readers. It is simple, systematic and free from all unnecessary verbage. The publishers have presented the present edition in elegant typography and tasty appearance. For sale by Geo. S. Blanchard & Co. Price \$1 25.

Transactions of the Medical Society of the State of Pennsylvania. We have received the volume of the transactions of the Eighteenth Annual Session, held at Pittsburg, June, 1867. It makes a handsome volume of five hundred pages, and contains much valuable matter. The Prize Essay on Transfusion and Infusion, by Dr. Ullersperger, is very full and mature; and the address of the President, Dr. King, is very able.

Transactions of the Illinois State Medical Society. The Seventeenth Anniversary Meeting was held in Springfield, June 4th, 1867. Our Illinois neighbors begin to rival the older States of the Union in the bulk of their published transactions. This year's volume is of much value, the most noticeable contributions being the report on Plastic Surgery, by Dr. Prince, which is lengthy and very abundantly illustrated.

Observations on the Nature and Treatment of Polypus of the Eye. By EDWARD H. CLARKE, M. D., Professor of Materia Medica in Harvard University, etc.

Mechanical Therapeutics. A practical treatise on Surgical Apparatus, Appliances and Elementary Operations, embracing Bandaging, Minor Surgery, Orthopraxy and the Treatment of Fractures and Dislocations. By PHILIP S WALES, M. D., Surgeon U. S. N., with six hundred and forty-two illustrations. Philadelphia: Henry C. Lea, 1867.

As will be seen from the title page, our author proposes to give a little of almost everything pertaining to minor surgery and appliances; and we confess to a great deal of pleasure in examining the work. It is the completest book on these subjects we know of, and it can not fail to be exceedingly useful to the busy practitioner, especially to the busy country physician who has thrown upon his care something of surgery in its various details, with all manner of general practice, and, therefore, may often wish to refresh himself as to the most convenient and elegant modes of dressings and manipulations.

The illustrations of instruments, dressings, apparatus and bandages, are very full and satisfactory.

It will be found a convenient book of reference for those wishing to enter the public service, affording minute information upon subjects included in the rigid examinations of military and naval boards. For sale by Robert Clarke & Co. Price \$6 75.

Biennial Retrospect of Medicine, Surgery and their Allied Sciences. Edited by DRs. POWER, ANSTIE, HOLMES, WINDSOR, BARNES AND FAGGE, for the New Sydenham Society. Philadelphia: Lindsay & Blakiston, 1867.

This is a valuable reprint and contains a condensed retrospect of the progress in Physiology, Medicine, Surgery, Ophthalmic Medicine, Medical Jurisprudence, Materia Medica and Public Hygiene. The only criticism of any force that we have seen, is the question of propriety in republishing the Sydenham works in this manner, and thus dividing their patronage so as to cripple the ability of the society to continue its valuable series. For sale by Robert Clarke & Co. Price \$3 50.

Present Status of the Philosophy of Society. By LELAND A. WEBSTER. R. W. Carroll & Co., Cincinnati, C. S. Westcott & Co., New York, Publishers, 1866.

This work may be briefly characterized as one of the many very large undertakings which distinguish the intellectual, not less than the industrial, efforts of the present century. It is a part of a series, as the title page informs us, comprising a com-

plete review, historical and critical, of the progress of thought in social philosophy, and designed as a general introduction to the author's own views in regard to the deep questions of that philosophy.

This is properly the sixth part of that review, as the preface informs us, and comprises a summary of the five preceding parts as yet unpublished, at the same time that it brings prominently into view the most advanced ideas of the latest and most advanced thinkers. The specific design of this particular work, as the author informs us, is, to present "the combined result of all anterior researches and reasonings on the philosophy of society, before proceeding to the promulgation of his own," which he promises in another work, the seventh and last of the series.

The magnitude, as well as importance of his design, may be inferred from the fact that the author claims, for his discoveries or reasonings, that they accomplish, in the philosophy of which he treats, what those of Newton accomplished for sidereal philosophy.

The great want of social science, the author argues, is a correct *diagnosis* of the causes which determine the social condition of mankind, while a tolerable correct *therapeutics*, he admits, has been already attained, in accordance with the great law to which he often adverts that *practice everywhere precedes theory*, although it can never be perfected, or scientifically verified, until it has attained to correct theory.

The leading aim of the author is to supply this great fundamental need of social science. In the present work he rather hints at, than distinctly discloses, his own views. Yet the work is so replete with the valuable thoughts of the most eminent thinkers, alike of ancient and modern times, condensed and systematized, and interpersed with his own critical observations, that it must make an important addition to every library, and more especially to every one of a scientific character.

The Practice of Medicine and Surgery applied to the Diseases and Accidents incident to Women. By WM. H. BYFORD, A. M., M. D., Author of a Treatise on the Chronic Inflammation and Displacement of the Unimpregnated Uterus. Professor of Obstetrics, etc., in Chicago Medical College. Second Edition Enlarged. Philadelphia: Lindsay & Blakiston, 1867.

Prof. Byford is rapidly assuming a front rank, if he does not already occupy that position, amongst American gynecologists.

His little book on the uterus was well received, and this prompt demand for the second edition of his larger more elaborate book indicates the favor with which his writings are regarded by his brethren.

In the plan of our author, this volume embraces the derangements of menstruation, the various diseases and accidents to which the female organs of generation are liable; cancer of the uterus; tumors of the uterus; ovarian tumors; puerperal convulsions, etc. In all the topics embraced, Dr. Byford shows an intimate familiarity with practical details, and a pains-taking carefulness to give exact and useful teaching. The present edition gives some new matter, though the bulk is not materially different from the first edition. For sale by G. S. Blanchard & Co. Price \$5 00.

Synopsis of the Course of Lectures on Materia Medica and Pharmacy, delivered in the University of Pennsylvania, with five Lectures, on the Modes Operandi of Medicine. By JOSEPH CARSON, M. D. Fourth Edition Revised. Philadelphia: Henry C. Lea, 1867.

The value of this little volume is chiefly to the student, who follows the course of instruction given by the author in the medical department of the University of Pennsylvania. Otherwise there is an incompleteness that runs through the whole book, requiring the filling up of regular lectures. It is handsomely published, and to the class will be a convenient, handy book. For sale by Robert Clarke & Co.

A Report on Amputation at the Hip Joint in Military Surgery. Being Circular No. 7, War Department, Surgeon General's Office, Washington.

Catalogue of the United States Army Medical Museum, Medical, Surgical and Microscopical. Prepared under the direction of the Surgeon General of the United States Army:

The Surgeon General has placed the profession of the country under peculiar obligations for the careful attention he gives to all that can promote its national character. The several circulars, issued from time to time for the information of the medical officers of the army, are permanent and valuable contributions to its literature. Circular No. 7, before us, embodies the experience of the war of the rebellion in relation to amputation at the hip joint, and is the report of Assistant Surgeon and Brevet Lt. Col. George A. Otis, of the United States Army.

We have first a carefully compiled historical summary of the

operation, then follows the account of fifty-three hip joint amputations as occurring in the war of the rebellion—thirty-four of these operations were performed in the armies of the United States, and nineteen in the rebel armies. A brief surgical history of each case, in regular order, is given, condensed from the reports of the original operators. Amongst these cases are included two by Prof. Blackman of this city, one fatal operated upon at St. John's Hospital, and the second near Cynthiana, Ky., which proved happily successful. The circular is abundantly illustrated with cuts of the shattered bones in many of these cases, and several beautiful chromo-lithographs of successful results.

The Army Medical Museum is well announced in the title of its catalogue. The mere catalogue itself being a literary curiosity in its wonderful and vast collection of interesting objects in its several departments.

Obituary.

Death of Prof. Jesse P. Judkins, M. D.

DIED, in Cincinnati, December 6, 1867, after a lingering illness, JESSE P. JUDKINS, M. D., Professor of Special Pathology, in the Miami Medical College of Cincinnati. He had been gradually failing for several months, so that his death did not take his friends so much by surprise, yet the shock was all the same, and few men have had so large a circle of deeply sincere mourners. His disease was softening of the brain.

Jesse Parker Judkins was born in the village of Mt. Pleasant, Jefferson County, Ohio, in 1815, of a Quaker family, whose names have been identified with medicine for nearly a century, and at a very early age developed a taste for mechanics, which, with a hereditary bias for the art of healing, shaped his course and directed his study toward surgery, which he finally became master of and famous in. He commenced his college education at Cannonsburg, Ohio, and finished at Steubenville, Ohio, but paid little attention to the honors of his collegiate course, contenting himself rather with acquiring a mastery of engineering and whitesmithing during the lapses of scholastic duty, which merely

literary ambitious youths expend in polishing for commencement day. At an early age he took a deep interest in medicine and surgery, and, with the example of his father constantly before his eyes, soon acquired a degree of knowledge in the profession and art which enabled him to enter upon their study at the Ohio Medical College, in 1836, under the most flattering auspices.

He graduated in 1838, and received his degree as Doctor of Medicine. In the following year he received the high honor of an appointment as Demonstrator of Anatomy in that time-honored institution with which so many men of eminence have been identified. No circumstance in the life of the young physician could be cited which can more clearly demonstrate at once his ability and his merit than this, for it must be borne in mind that his professional elevation was in a place and at a time when such burning and shining lights as Drake, Locke, R. D. Mussey, Staughton, Shotwell and Cobb were professors and teachers.

With a modesty which excited the admiration of his seniors, and won the confidence of his peers, Dr. Judkins gradually took his place in the front rank of his profession, both as a practitioner and teacher, and for many years after his first distinction he pursued a life of unremitting industry and the highest usefulness. In a word, he practiced medicine in conjunction with his duties as Demonstrator of Anatomy and became famous.

Dr. Judkins projected and delivered several private courses of lectures on anatomy in this city, and was successful in drawing to his porch a class of young men, a majority of whom have since attained distinction in medicine. His treatment of students was such as won their confidence, esteem and affection. His lecture always attracted the crowd, and, while the knowledge it contained was imparted, there accompanied it an amount of humanity that enlisted the heart and refreshed the mind. To that branch of his profession he now devoted the greater part of his time and attention, and made such advancement that, as an anatomist, he was regarded as second to none. He was called to the Starling Medical College of Columbus, as Professor of Anatomy, in the session of 1847-8, and continued there until the close of the session of 1851-2, when he accepted the Professorship of Descriptive Surgery, in the Miami Medical College of this city, at that time located in the building on the north-west corner of Central Avenue and Fifth Street. In that college he continued and labored up to the time of his death, having had his department changed to that

of Special Pathology, and leaves a record which his professional associates can point to with pride and satisfaction.

In the pursuit of his culture in the higher branches of the surgical art, Dr. Judkins visited Europe early in 1853, and remained abroad over a year, during which time he visited all the famous hospitals of the Continent, and, upon his return, adopted, as a specialty, one of the most important branches of medical and surgical practice. Although possessing rare qualifications for surgery, there was something in it not altogether congenial to Dr. Judkins, and he gradually abandoned it for such branches as the art of healing entered more fully into, until the latter years of his highly useful professional life, when he abandoned mere operative surgery.

Dr. Judkins was a bachelor, and, as such, the center of a large circle of friends, whose companionship he enjoyed to the last. Among his professional brethren he was much esteemed and beloved, and by a greatness of heart and loyalty in friendship grappled them to him with hooks of steel. He was, in the highest sense, a gentleman, and stood forth a noble representative of that chivalric manhood which no time, place, or circumstance can conceal or cause to be forgotten. His look inspired confidence, and his word was the highest assurance of the most devoted and faithful performance. Dignified, yet modest, in his deportment, Dr. Judkins inspired the respect of every one with whom he came in contact, and his natural kindness of heart confirmed all his manner promised. He really endeared himself to thousands of his fellow-citizens, and his loss to them, even in a social respect, will be irreparable.

Up to the autumn of 1863, Dr. Judkins displayed remarkable energy and led a very active life, but at that time an accident, by which one of his feet was injured, laid him up for a few weeks and somewhat impaired his health. In the January of 1864, his elder brother, Dr. Robert P. Judkins, died in Highland County, Ohio, and that event preyed uyon his mind so heavily that all his intimates remarked the change. He was deeply attached to his deceased brother, and never ceased to grieve for his loss. Indeed, the bereavement affected his health, and his naturally robust constitution began to give way, until, during the past summer, he was obliged to seek rest and recuperation by a few months' residence in Mackinaw, without, however, any permanent benefit to his failing health. A few weeks ago he was prostrated, and

during what proved to be his final illness, bore his affliction with exemplary patience and fortitude, and calmly sank to rest.

His funeral was attended by the Faculty and students, in a body, of both the Miami Medical College and the Medical College of Ohio; the funeral services being conducted by the Rev. Mr. Snively, of Christ Church.

At a meeting of the profession of this city, Dr. Vattier presiding, Drs. Murphy, Vattier, Tate, Richardson and Dawson were appointed a committee, who reported the following:

Our late brother and friend, Jesse P. Judkins, is no more. No ordinary man has passed away. For almost thirty years he has occupied a position in the profession, and in the public, equaled by few. Descended from a family in whom a love for the study and a tact for the successful practice of medicine existed in a high degree, he was eminently qualified by nature for the duties of the profession. Of an excellent order of mind, with great generosity of heart, amiability and geniality of disposition, and a striking personal appearance, few men in his day were more generally beloved, in and out of the profession. Indeed, few men enjoyed so large a share of public confidence. When in active practice, his business and office consultation was immense. His skill was equaled only by the sympathy, humor, and, in one word, the magnetism of his manner.

His generosity was unbounded. To the poor he was the humane, good physician. To such a degree was this trait developed in him, that advantage was taken of by the undeserving. He was one of the few men in our profession who always was kind and considerate to all, but especially to young men. Youthful in his feelings even to the last, he always enjoyed the warmest friendship of students and young physicians.

Ready and willing, he gave advice, sympathy and support to all young medical men. Indeed, no respectable professional man ever called on him in vain for assistance. In his professional relations he was a gentleman. Free, by nature, from all petty envy, satisfied with his own efforts, and animated with a high regard for the profession, it was impossible for him to be aught else than a gentleman.

Dr. Judkins was successful as a general practitioner and a surgeon. In the special department to which he gave so much study, and in which he was so strong, he may well be called the Ricord of the West.

As an anatomist and a demonstrator he had few superiors. Therefore, be it

Resolved, That we bow to the decree of an allwise Providence, who has removed from us our friend and brother, Dr. Jesse P. Judkins.

Resolved, That in his death the profession of this city loses a

distinguished member, an eminent practitioner, a gentleman, and the city a useful and valuable citizen.

Upon the question of the adoption of the report, Drs. Murphy, Tate, Simpson, Langdon and Mussey delivered brief addresses, in which the many personal and professional virtues of the late Dr. Judkins were set forth and commended.

The report was then adopted unanimously, and, on motion, it was resolved that the profession attend the funeral of their deceased brother in a body.

On motion, it was also resolved that Dr. J. H. Tate be appointed as Marshal of the medical body on the occasion, and then the meeting adjourned.

ACTION OF THE MIAMI MEDICAL COLLEGE FACULTY.

At a meeting of the Faculty of the Miami Medical College, held at the College, to take action on the death of Prof. Jesse P. Judkins, Drs. Mussey, Taylor and Stevens were appointed a committee, who reported the following:

God, in His allwise Providence, has removed from us our colleague and friend, Jesse P. Judkins, M. D. Our association with him has been long and intimate; we ever found him noble, generous and reliable. Our College loses one of its original founders. A tried and steadfast friend, we deeply deplore his loss.

As a Faculty, we sympathize with his family, the profession, and the whole community, that a good and true man has gone from all earthly labor to enter upon eternal reward. He was eminent as a careful and skillful surgeon and physician, and an excellent teacher. He was deeply beloved for the genial qualities of a generous social nature.

Resolved, That this expression be placed on the records of the Faculty.

Resolved, That we attend the funeral as a Faculty, and request the joint attendance of the class.

Resolved, That this action of the Faculty be published in the city papers.

W. H. MUSSEY, M. D.,
W. H. TAYLOR, M. D.,
EDWARD B. STEVENS, M. D., } Committee.

GEORGE MENDENHALL, M. D., *Dean.*

The Academy of Medicine also adopted suitable resolutions.

DEATH OF DR. HOMBERG.—Died, in Cincinnati, January 4, 1868, of hemorrhage of the lungs, Dr. F. W. HOMBERG. He was a worthy German practitioner of this city, and highly esteemed.

Tribute of Respect.

The Committee, heretofore appointed to prepare resolutions in regard to the death of Dr. Edward P. Fyffe, presented the following:

Dr. Edward P. Fyffe, for many years one of the leading physicians of Champaign County, having departed this life, at his residence, in Urbana, on the twenty-fifth, November after a long and painful illness, therefore

Resolved, As the sense of this meeting, that in the death of Dr. Fyffe, the Medical Profession has lost an able and efficient member.

Resolved, That in sacrificing a lucrative practice and the comforts of home, for the purpose of assisting the Government to put down an armed rebellion that threatened the destruction of republican institutions, Dr. Fyffe exhibited a spirit of patriotism honorable alike to himself and the profession, and worthy of the highest commendation.

Resolved, That we deeply sympathize with the family of the deceased in their bereavement, that we tender them our sincere and unaffected condolence, and commend them to the care of a kind and all-wise Creator, who is plenteous in mercy to all who call upon Him.

Resolved, That, as a token of our sympathy, a copy of the proceedings of this meeting be furnished to the family of the deceased; also that the editors of the *Citizen and Gazette*, *Union* and *Mac-a-Cheek Press*. of Urbana, and the *LANCET AND OBSERVER*, of Cincinnati, be requested to publish the same in their respective journals.

W. M. HOUSTON, J. M. MOSGROVE, EVAN BANE, F. BAKER, J. C. BROWN,	}	<i>Committee.</i>
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The resolutions were unanimously adopted.

W. M. MURDOCK, *Chairman.*

JAS. M. MOSGROVE, *Secretary.*

Death of a Medical Student.

MR. J. W. STILES, of Ohio, presented himself as a student at the Miami Medical College at the opening of the session, October 1st. His deportment was that of a studious, diligent gentleman, but his career was a short one. In November he went home with typhoid fever, and December 1st he quietly deceased. He had the promise of unusual future usefulness, and his friends will deeply mourn his early death. The Faculty of the College took appropriate action in regard to his decease, and his class-mates have forwarded to us the following for publication:

MIAMI MEDICAL COLLEGE,
CINCINNATI, O., December 6, 1867. }

At a meeting of the class, held this day, J. Labaree, presiding, and W. F. Smith, Secretary, a committee was appointed to take action in regard to the death of our late fellow-student, John W. Stiles. The following resolutions were presented and adopted:

WHEREAS, It has pleased God in His inscrutable wisdom to call from among us our highly esteemed friend and fellow-student, therefore be it

Resolved, That in the death of John W. Stiles this class has been deprived of one who, by attention and close application to his studies, promised to adorn the profession.

Resolved, That this class feels and would desire most respectfully to express the profoundest sympathy with the family in their sad bereavement; and that it would tender these words of heartfelt tribute to them, not as adequate marks of regret for our departed friend, but as an assurance that we are but a part of a circle of friends who share in the same deep sorrow, knowing, as we do, how sad and sorrowful that home must be, which has lost one so worthy of its love and our highest regard.

Resolved, That a copy of these resolutions be presented to the family of the deceased; also published in the *Courier* and *Sun*, Clermont County, and the *Lancet and Observer*, of Cincinnati, O.

A. T. JAYNES,
F. GUNDRUM,
S. D. COFFIN,
WM. M. KERR, } Committee.

A. W. DAVIS, *Chairman.*

Business Notices and Acknowledgements.

NEW BOOKS.

Byford—Medical and Surgical Diseases of Women. Lindsay & Blakiston.

West—On the Diseases of Women. Henry C. Lea.

Carson—Synopsis of Materia Medica. Henry C. Lea.

Stille—Epidemic Meningitis. Lindsay & Blakiston.

Wilson—Hufeland's Art of Prolonging Life. Lindsay & Blakiston.

Cohen—Inhalations. Lindsay & Blakiston.

Wright—Headaches. Lindsay & Blakiston.

Morris—Shock. J. B. Lipincott & Co.

Wales—Surgical Operations and Appliances. Henry C. Lea.

Elliott—Obstetric Clinic. Appleton & Co.

Fuller—Lungs and Air Passages. Henry C. Lea.

FOUGERA'S PREPARATIONS.—We have received a handsome collection of specimens of these peculiar articles. Nothing in this line is more tasteful in appearance, and, though of French origin, they so nearly correspond to the U. S. P. that there is no embarrassment in their administration. We are making trial of some of these preparations, especially the *Iodinized Codliver Oil*, with satisfactory results.

MR. MAX WOCHER continues to receive the newest appliances at his store. He has given a good deal of attention to apparatus for inhalations, and just now he has in course of publication a full translation of Dr. Siegel's work on the Treatment of the Air Passages; also Thudicum's book on the Treatment of Chronic Catarrh. Due notice of their issue will be given.

TO CLUBS.—We offer a club arrangement for discount, with other periodicals, as follows:

London Lancet, and Lancet and Observer.....	\$7 00
Braithwaite, " "	5 00
Butler's Compendium, " "	5 00
Atlantic Monthly, " "	6 00
Either of Harper's, " "	6 50
Godey's Lady's Book, " "	5 50

Subscribers desiring to avail themselves of this advantage will please remit promptly.

PALMER'S ARTIFICIAL LEG.—We desire to sell an order for one of Palmer's Artificial Legs, and shall be pleased to communicate with any of our friends upon the subject.

To THOSE FRIENDS who have so promptly forwarded new subscribers we return our sincere thanks for the interest they have manifested in our continued success, and we take this occasion to say to all, that we enter upon the new year with the best prospects the *Lancet and Observer* has ever known; its list was never more satisfactory in character, and its number is now the largest it has ever been. We hope, too, we have a new printer who will be both prompt and tasteful, notwithstanding our present late start, which is unavoidable.

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

VOL. XI.

FEBRUARY, 1868.

No. 2.

Original Communications.

ART. I.—*Medicinal Action and Uses of Alcohol.*

BY W. L. SCHENCK, M. D., Franklin, Ohio.

IT is not the design of this article to discuss the physical diseases, or the intellectual and moral degradation which result from the continued or excessive use of alcohol. As guardians of the public health, and thereby of the public morals, physicians should exercise due care in the use of an article so subject to abuse, and this end will be best attained by a proper understanding of its “modus operandi.”

When we know what an agent can do and how it does it, and understand the pathology of disease, it is unnecessary to specify the particular cases or diseases in which it should be given. Therapeutics and pathology are the means and the end, both being known, difficulties in the use of agents vanish. Let us examine the medicinal action and uses of alcohol. Pereira, in his *Materia Medica*, says: “As a *stomachic stimulant*, spirit is employed to relieve spasmodic pains, to check vomiting (especially sea-sickness,) and gives temporary relief in some cases of indigestion, attended with pain after taking food. As a *stimulant and restorative* it is given with considerable advantage, in the latter stages of fever. As a *powerful excitant*, it is used to excite the vital powers, to prevent fainting during tedious operations, and to relieve syncope and languor. In *delirium tremens* it is not advisable to leave off the employment of spirituous liquors at

once, since the sudden withdrawal of the long accustomed *stimulus* may be attended with fatal consequences." In all these cases, experience has shown that the patients have derived a certain amount of benefits from the use of alcoholic "stimulants." They temporarily relieve spasmodic pain and painful digestion, because they produce anaesthesia—a want of sensation in the gastric nerves. Alcohol will aggravate rather than relieve many cases of vomiting, for they depend upon paresis or paralysis, and consequent relaxation of the oesophagus. In sea sickness, the involuntary plexus supplying the muscular fibres of the oesophagus, which hangs somewhat loosely into the abdominal cavity, is temporarily paralyzed in those unaccustomed to the swinging motion of a ship or carriage, by the constant succession of small strokes thus produced, causing a result similar to a severe concussion. Alcohol renders the nerves insensible to the impressions of these little concussions, and thus prevents or relieves sea sickness.

In low delirious fevers the other portions of the body have become inactive and insensitive, whilst the nervous system, the "ultimum moriens," that upon which disease exerts its last destructive influence, remains active and sensitive. With alcohol we hold the nerves in abeyance whilst we build up with nutritives and tonics, and thus restore the lost balance of the functions. Lehmann, in his Physiological Chemistry, says: "We can not believe that alcohol, theine, etc., which produce such powerful reactions upon the nervous system, belong to the class of substances which are capable of contributing toward the maintenance of the vital functions. We saw this, for instance, in the case of alcohol, which, when taken with the food, diminishes the pulmonary exhalations instead of increasing it." Vierordt found that the excretion of carbonic acid was both absolutely and relatively diminished even after a moderate use of spirituous liquors, and Prout that the increased excretions of carbonic acid, which accompanies digestions, was considerably checked by the use of spirits. In low delirious fevers, the nervous system is active beyond the endurance of itself and the other portions of the organism, and destructive metamorphosis is increased as seen in the increased excretions. In these cases we prescribe alcohol not as a "stimulant and restorative," but for the reasons indicated in the statements of these physiological chemists. It checks

excessive nervous action, diminishes the destruction of tissue, and gives time to build up with restorative agents.

Its physiological effects, after operations and injuries may, perhaps, be best illustrated by a case. During the little fight at Wild Cat, Ky., a soldier of the Thirty-third Indiana was brought to me speechless, almost pulseless, and apparently dying. A hasty examination showed nothing but a flesh wound of the thigh; directing an assistant to ply him well with brandy, I turned to other patients. With difficulty he swallowed a pint of brandy and was better. The next day I found a spent ball had rolled over one of his testicles, seriously injuring the organ without breaking the skin. In addition to the moral shock, he was depressed by the intense pain of the injury. The anaesthetic influence of the brandy acted alike upon the shock and the pain. If it had aroused his depressed nervous system by stimulation, would it not have exalted his perception and increased his sense of pain? and his depression being largely dependent upon his pain, left him about where it found him. It did not relieve him because it was a "powerful excitant," but because it allayed excitement.

In delirium tremens we have a nervous system too active for the worn out body, and we give alcohol not as a stimulus—a medicine to excite action—but to hebetate the nerve and arrest destruction, whilst, with other agents, we stimulate and renew life, and thus restore the lost balance.

Christison and Griffith, in their Dispensatory, tell us that alcohol is primarily stimulant and secondarily sedative; but, say they, "the sedative and narcotic action of alcohol as an internal agent, are not turned to use in the practice of medicines." We are inclined to think the same of its stimulant action. They also inform us that "alcoholic liquids are more or less diuretic, and this action is most easily excited when they are given considerably diluted." No one will deny that certain spirituous liquors are diuretic, but is it by virtue of the alcohol they contain? Upon examination, we will find that it is those and those only that are considerably *diluted* with oil of juniper, etc., as gin, with tartar as wine, etc., that act as diuretics, and that pure alcohol is incapable of stimulating organic action, and hence is never a diuretic.

Wood and Bache, in the U. S. Dispensatory, speaks of alcohol as a powerful diffusible stimulant, valuable in some states of

disease characterized by extreme exhaustion. If it is a stimulant good in some, why not in all states of extreme exhaustion? Why not as good in anaemia, phthisis and the collapse of Asiatic cholera, as in the latter stages of enteric fever? Because it adds nothing to vitality, is incapable of stimulating vital action. In anaemia it neither enriches the blood nor aids in the digestion of those articles capable of doing so; in phthisis its only possibly good is its influence in the assimilation of fat; and in choleraic collapse, if taken into the circulation, it only adds to the paresis already produced in the pneumogastric nerves; but in these fevers it allays nervous excitement and excessive destructive metamorphosis, whilst other agents stimulate and restore. They also tell us "it communicates additional energy to the muscles, and gives temporary exaltation to the mental powers." Very important results! and in the vain effort to secure them, the wise and the foolish have alike gone down to the dishonored grave of the drunkard. Is it possible that alcohol can produce either of these results? Does it contain a single element capable of giving fortitude or genius to the soul or strength to the muscle? If not, is not such doctrine largely responsible for the floods of intemperance that have cursed the world. Alcohol can not be converted into nervous or muscular matter, and so far from stimulating nervous or muscular action, its tendency is the reverse. Whence then the general impression that it is capable of producing these effects? It loosens the chord that binds the spirit to a corrupt body; lessens not only the perception of external impressions, but of all the true relations of life, blunts our sensibility to the little annoyances and half felt pains which beset us. If Candle's sensibilities are too keen, patiently to endure the tongue of his wife, he blunts them with wine. If a man suffers from remorse, he drowns his perceptions with rum. If he decides to commit a crime he drinks whisky, not to stimulate his mind to a better conception of the realities of life, to a more correct perception of the enormity of crime, to a truer sense of duty; he has too much of this already; but to repress his sense of right to hebetate conscience. Even he who had sounded the lowest depths of debasement and could assassinate our noble hearted President, would not commit the foul deed until he had drowned his conscience in the intoxicating bowl. The poet drinks that he may break the link that binds him to earth, free himself from physical bondage, and soar untrameded in the regions of the ideal. The orator to allay the

trepidation and anxiety, consequent upon his appearance before the public. The soldier does not increase his courage, but drowns his cowardice with his dram. It gives no "exaltation to the mental powers," but prevents them being disturbed by anxiety or circumstance. It creates neither genius nor fortitude.

Those who drink do not rise above difficulties or overcome obstacles, but render themselves oblivious to their existence. The drunken man who staggers against the wall does not remove it, but is heedless of its presence. It adds no strength to the muscles, but renders us unconscious of the magnitude of obstacles, and we lift and labor as though we could do all things; but drinking beyond a certain limit we lose not only the consciousness of difficulties and obstacles, but all control of both mind and muscle.

The people take alcohol for an almost endless variety of morbid conditions. It is their grand catholicon, for it gives temporary relief from nearly "all the ills that flesh is heir to," without apparent immediate evil effects. After its use the patient feels better because he ceases to feel. If he is weak, for example, he feels stronger because he ceases to feel his weakness. The question for the medical man is, does it give any strength, is it nutritive or can it stimulate vitality? Will it cause a worn out cell to be thrown off and replaced by a new one? Careful investigation shows that it passes unchanged by the digestive process into the circulation, that it produces paresis of the nerves, and thus arrests both constructive and destructive metamorphosis, that it is ultimately thrown off through the various emunctories in the same condition as when swallowed, and that so far from containing any element that can add to the strength it tends to produce deleterious chemical changes in the circulation from which the body is to be nourished. Some physicians take this semblance of a benefit for a reality, or find it convenient to impose it on their patients for a larger variety of diseases, and thus, whether regular or irregular, prove themselves but quacks.

Hostetter, who proclaims that "alcoholic medicines are among the most valuable remedial agents in the *Materia Medica*—specifies, which can not be dispensed with, necessary tonics, curative stimulants and preventatives, and hence no benevolent and enlightened friend of temperance can lift his voice against Hostetter's Bitters."

Many esteemed authorities are wont to teach that alcohol

stimulates digestion and constructive metamorphosis, because under its moderate use the weight of the body is often increased. It is increased by the deposition of fat which is not an organized tissue, and whilst it may aid in the transforming other materials into tissue, its accumulation does not add to the strength or vitality of the body, but often detracts by causing fatty degeneration of organized tissues, thus evidencing lowered vitality. Whilst alcohol tends to coagulate and retard the transformation of those materials which build up the tissues, it assists in holding fatty matters in solution, and thus facilitates their assimilation; hence we may understand how, without stimulating digestion, it may cause an increase of bulk, and how, with this increase, there may be a degeneration of organized tissues, and a decrease of vitality. Alcohol may *facilitate*, though never stimulate digestion. Every one is aware of the control the emotions hold over digestion. The recluse, those whose minds are filled with anxious care, the morose and sullen, who eat their food without thanks, are dyspeptics. Where the trials and tribulations of life can not be cast aside by cheerfulness at meals, their temporary burial in alcohol will be found beneficial to digestion. One by joyous cheerfulness secures the free transmission of nervous influence to the digestive organs, the other enchains the given visage host that prey upon his brain with alcohol, and thus prevents their arresting its transmission until digestion is completed. But a nervous system asleep, blunted, insensate, can not be in a state of stimulation, and is not in the most favorable condition for functional activity. Alcohol, therefore, in these cases is used to replace an evil greater than itself, and the patient must be confined to the smallest quantity capable of producing the desired effect.

We often understand *what* a medicine is capable of doing, but *how* its effects are produced is frequently a darker question, and we sometimes seek to conceal our ignorance on this point by calling its action alterative, dynamical, etc. The action of alcohol upon the nervous system has been called dynamical, but as this term applies to agents which produce no obvious mechanical or chemical changes, we think it inappropriate. Its affinity for water causes its withdrawal, coagulating the liquid, albumen and fibrin, and condensing the soft tissues.

It may be questioned whether these effects can be produced by medicinal doses. Homeopathists inform us they can not in in-

finitesimal doses, that this is one of the exceptions to the doctrine of the potencies of shades and shadows. Alcohol has a greater affinity for nerve matter than for any other portion of the body, as may be clearly observed in the larger quantities of alcohol obtained from the brain of those who have drank it, than from an equal weight of any other tissue. I remember one autopsy of an intemperate man, where large quantities of alcohol were found in the brain, whilst none was detected in other parts of the body. From this strong affinity small quantities may produce very positive impressions from contact with the susceptible nervous system. And this corrugation occurs as rapidly as the impression upon the nerves. Immerse an earth worm in alcohol, and in less than five seconds all motion ceases, and its whole body is condensed, contracted, and corrugated. Pour alcohol upon the albumen of an egg, and it is immediately coagulated, and Dr. Percy has shown, in his experiments, the rapidity with which alcohol, when swallowed, is absorbed and borne to the various portions of the body. Take the constituents of nervous matter at

	In Gray Matter.	In White Matter.
Water	82.2.....	73.0
Albuminous Matter.....	7.5.....	9.9
Fat.....	7.7.....	14.8
Osmazone and Lactates...	1.4.....	1.0
Phosphates.....	1.2.....	1.3
	—	—
	100.	100.

If we pour alcohol upon this nerve matter, it will take out three parts of water for one it replaces of alcohol, and thus we see how largely it will be condensed. When we sit for a time on the sciatic, we diminish both sensation and muscular power in the limb. The surgeon, before passing a seaton needle, compresses the skin between his fingers to deaden sensibility. Is it not probable the condensation of severe matter, induced by alcohol, diminishes nerve force in the same way. But in whatever manner it acts, we think it clear that its action is not that of a stimulant, and that those who rely upon it for that purpose will be disappointed in their expectations. We will derive advantage from its use only in those cases when pain and anguish wring the brow, when anxiety and care lock within the brain that

influence necessary to enable the organs to discharge their respective functions, and when destructive metamorphosis is in excess of the other bodily functions, and in these cases it is never more than an adjuvant.

ART. II.—*Croup.*

BY J. A. MCFARLAND, M. D., Tiffin, Ohio.

THE December number of the *Lancet and Observer*, has an article on the treatment of Croup by "the application of cold water to the throat of the patient." The writer regards this application as a *new remedy*, and expresses astonishment that it has not been more generally employed by the profession. He has resorted to its use since the year 1862, "in some half dozen cases, with entire success," and he prefers it to any other treatment known to him.

The preference thus expressed, we venture to say, is in perfect harmony with the mind of the profession—that is, in so far as medical men have made a fair trial of the remedy. Having no faith in specifics, we dislike to speak in unqualified praise, of any single therapeutic agent. The temptation, in this instance, however, it must be confessed, is very strong to run off in that direction. But we promise, in what we say, there shall be no exaggeration.

Perhaps it will not seem extravagant commendation, to call it a most valuable remedy, and better than any other, when the same language greets the advent of every new candidate for popular favor.

A long experience with the use of cold applications in the management of Croup, will be some apology for the confident tone we employ in commending the same to the consideration of others. Indeed, so far as I know, I may fairly claim *priority* in the use of ice water in the treatment of this disease. Our first experiments were made in January, 1843, just twenty-five years ago.

The beneficial results were so well marked, and positive, as to leave no room for doubt. The facts were at once communicated to my medical friends, with the request that, as opportunities offered, they would give the remedy a fair trial. Croup was then, in

this part of Ohio, a very common, as well as fatal disease. It was not long before trials enough were made to satisfy all that ice water was *the remedy* in Croup. Every physician here soon adopted the practice, and once adopted, it was never abandoned. It is now universal in this region. Everybody, in and out of the profession, understands it, and *has confidence in it*. It is a rare thing to visit a child supposed to have Croup, without finding its throat already enveloped in folds of muslin, wrung out of ice water.

Nobody will deny, that under this mode of treatment, the percentage of recoveries has greatly increased. It would be exceedingly interesting and satisfactory, could we refer to the mortuary statistics, or better still, to well digested tabular exhibits of Croup cases, with results under different kinds of treatment. Such information, it is believed, would demonstrate that the treatment we advocate has reduced the mortality from Croup at least fifty per cent.

Ice water alone, when timely and perseveringly employed, is often sufficient to effect a cure. But, in the presence of a disease so alarming as Croup frequently is, other remedies are properly invoked simultaneously; and, in threatening cases, they should never be neglected. When a single day, or a few hours may decide the battle for life, the physician will prove his skill by concentrating upon the enemy a sufficient force of available means—a wise selection of such as are clearly indicated, and known to aid and assist each other.

To be successful, the cold applications should be repeated frequently—say every five to fifteen minutes—and followed up until the danger is passed. The time required may be one, or two, or several days, according to the progress of the disease when treatment is commenced, and the peculiarities of each case.

Such emetics as sometimes notably depress the vital powers, should be used, if at all, with the greatest caution, and only at the commencement of an attack. To very young children, antimonial emetics should never be administered. In all cases, but more especially in protracted ones, the milder articles, such as ipecacuanha, or alum, or sulphate of zinc, should have the preference.

In neglected cases, with considerable membranous deposite, we must beware of pursuing a very active and depressing treatment. Here, time is an all-important element, which we must gain if we would save our patient.

In conclusion we would refer to an article on "Ice Water in Croup," which we contributed in 1860, to the *Columbus Review*, and which was republished soon after in other Medical Journals. There is abundant reason to believe that the seed thus sown will not perish, but on the contrary, that it will continue to increase and multiply, till finally, "in the good time coming," the heart of every laborer in the field of medicine, will be gladdened by its beneficent fruits.

ART. III.—*On the Treatment of Inflammation of the Limbs by the Compression, or Ligature, of their Main Arterial Trunk.*

BY GEORGE C. BLACKMAN, M. D., Professor of Surgery in the Medical College of Ohio; Surgeon to the Samaritan Hospital, and Consulting Surgeon to the St. Mary's Hospital, Cincinnati, Ohio.

THE writer has read with much interest the editorial comments in the *London Lancet* of December 7th, of Dr. Vanzetti's method of treating phlegmonous or articular inflammation of the limbs, by the digital compression of their main arterial trunks. It is stated that "English surgeons have carried out the principle of the practice to a bold length, neither contemplated nor approved by Dr. Vanzetti, but none the less interesting physiologically, on that account. We refer to the ligature of the femoral artery, by Mr. Little, in a case of acute traumatic inflammation of the knee joint, on the suggestion of Mr. Mauder. Indeed, the case of Mr. Little, and that of Mr. Jackson, reported in our columns (June 15th and 29th,) have apparently had much to do with the revival of Dr. Vanzetti's interest in the matter, and induced him to bring it again before the profession." The object of our communication is not to question the influence above claimed for English surgery, but to contribute something toward the history of this method of treatment, and to exhibit the result in the hands of American surgeons.

We have been unable to find the report of any case in which the femoral artery was ligated as a remedy for a wound of the knee joint, prior to that in which the operation was performed by Henry U. Onderdonk, M. D., on June 17th, 1813. The

patient was cured, and the case was reported in the *American Medical and Philosophical Register*, Vol. IV, 1814, p. 176.

A similar operation was performed by David L. Rogers, M. D., of New York, and is reported in his paper "On the Utility of tying large arteries in preventing inflammation in wounds of the principal joints, with cases," in the *New York Medical and Physical Journal*, Vol. III, 1824. In the absence of the journal containing Dr. Rogers original papers, we are compelled to quote from a synopsis of it published in the *American Medical Recorder*, Vol. VIII, April, 1825, p. 375—6.

"The case was one of a simple wound in the knee penetrating the joint. It attracted little attention, the man using freely spirituous liquors in the first days of the disease. It became more inflamed, and amputation appeared to be necessary. The femoral artery was taken up, and the man got well by the twenty-fifth day. This plan is recommended to lessen inflammation in compound fractures, and dislocations of the ankle, where an effort to save the limb is advisable. Should, however, there be danger of tetanus, which does not appear to be governed by the increase or diminution of arterial excitement, amputation would be advisable in many instances, in preference to taking up the artery in order to abate inflammation. When these injuries occur in young subjects with unimpaired constitutions, and enjoying the benefits of country air, the attempt to save the limb should undoubtedly be made, and then the measure of tying up the artery would be advisable."

Dr. Rogers then refers to a case of compound dislocation of the ankle, in which Dr. Mott ligated the femoral artery. Trismus supervened on the seventh day from the accident, (the wound till then doing well,) and the patient died. Dr. R. gives the particulars of two other cases which, in his opinion, go to prove that the danger of mortification from defect of circulation is less than might be supposed. A lad, æt. sixteen, was brought to the hospital, July 4th, 1821, with an extensive laceration of the arm, which he received from the discharge of a gun while imprudently resting his arm upon the muzzle. The discharge entered his arm about the elbow joint, tearing off the integuments for six inches in length and three in breadth. The nerves, veins and arteries, lay like cords on the surface of the wound. The muscles were lacerated in such a manner as to destroy the appearance of their original structure. The bone was laid bare,

and, in some parts, denuded of its periosteum. For some hours he was greatly prostrated, his pulse weak and frequent. The extent of the wound led the attending surgeon to believe that the brachial artery, or some of its large branches, was divided, and hemorrhage was looked for as soon as the patient might rally from the shock of the accident. To lessen inflammation and prevent hemorrhage, the brachial artery was ligated just as it ceases to be axillary, and although little hope was entertained of saving the arm, to the astonishment of all who saw the case there was merely sufficient inflammation in the wound to produce healthy suppuration and granulation. He suffered but little pain during his recovery, and I may venture to assert there was no more inconvenience experienced from this lacerated wound, than there would have been from a simple incised wound of the same extent, when the circulation had not been interrupted. He recovered rapidly, and in the course of a few weeks left the hospital in good health.

In July, 1863, after the great battle in front of Richmond, and the retreat of the Union army to Harrison's Landing, on the James River, we had the pleasure of meeting Dr. Rogers at General McClellan's headquarters, and among the first surgical cases reported us, there was one in which the femoral artery had been successfully ligated by him, or at his suggestion, for a gun shot wound of the knee joint, and he was warmly advocating the operation in the treatment of such cases. Dr. Daniel F. Wright read a paper on "the therapeutic effects of the ligation of large arteries" before the Montgomery County, Tenn., Medical Society, January 8th, 1866, which was published in the Richmond, Va., Medical Journal, April, 1866.

Dr. Wright states that his attention was first specially directed to the influence upon the pathological conditions of a part exercised by ligating its principal artery, in consequence of certain opinions which had been advanced by Dr. H. F. Campbell, of Georgia, who, early in the history of the war, had been placed in charge of the hospitals for Georgia Volunteers, established in Richmond, Va. These were afterward embodied in a work on Military Surgery by Dr. Campbell, and which was published under the auspices of the Surgeon General of the insurgent States. Dr. Wright, however, remarks that as Dr. C.'s views are only incidentally mentioned in that work, he should not have appreciated their importance had he not heard him *viva voce* on the same subject. Dr. W. gives the following synopsis of what he, as well

as Dr. Campbell, erroneously supposed to be a "new doctrine;" that the ligation of the principal artery of a member, which is ordinarily supposed to occasion gangrene and necrosis in the parts supplied by the occluded artery has, on the contrary, a marked therapeutic influence, not only upon tumefaction and unhealthy discharges, but in arresting gangrene and promoting the healing process. He adds that Dr. Campbell supports his doctrine by the history of six cases, for the particulars of which he refers to the work in question. Dr. Wright had, at length, an opportunity of making his own observations, as he was placed in charge of the second division of Winder Hospital, in Richmond, "the largest establishment of the kind in the late Confederate States." He then gives a detailed statement of three out of five cases, which he says are typical of the others, and "confirmatory" of the six cases reported by Dr. Campbell.

CASE 1.—*Private J. P.*, of the Second North Carolina Cavalry, was wounded in one of the engagements before Petersburg; brought to the hospital next day. He had a flesh wound made by a minie ball, which had entered at the upper and anterior portion of the vastus internus muscle, and made its exit a little higher through the flexor muscles of the thigh; the ball had evidently, therefore, traversed the tracks of the femoral artery, in the middle third of the thigh. At the time I first took charge of this case, the wound was in a fearfully gangrenous condition, a state of things, which I may say was then very general, the hospital being crowded with the wounded, and the weather excessively sultry. An immense portion of the extensor muscles of the thigh had sloughed, and the arterial tract was, for several inches, exposed.

On the 27th August, profuse hemorrhage took place from the femoral artery, which was happily arrested by vigilance of the attendant, and I was immediately called. A compress had been applied at the seat of the injury by the Assistant Surgeon in charge; the patient was pale, with an anxious face, feeble pulsation, and his whole body suffused with a cold sweat. I directed a powerful stimulus, and, when the pulse had a little recovered its tone, had chloroform administered, applied a tourniquet to the artery, as near the pubis as could be affected, cut down upon the artery at the lower angle of Scarpa's triangle, ligated it at that point, and closed the wound.

Ordered nourishing diet and stimulants freely administered. The injured limb was, for some days, slightly colder than the

other, notwithstanding which, the condition of the wound commenced improving from that day. By September 2nd, or six days after the operation, the fetid ichorous discharge had been replaced by a rich creamy suppuration, and, by the 4th, granulations were healthy and abundant. From that time the healing process was rapid, and in about three weeks the man was furloughed.

CASE 2.—*Sergeant P. B.*, Company A, Forty-eighth North Carolina regiment, was wounded August 25th, 1864, by a musket ball, which shattered the middle finger of the left hand. Amputation had been performed on the field by Surgeon Montgomery, of his regiment—the head of the metacarpal bone being included in the operation. This was on the evening of the 26th, and the next morning he arrived at the hospital. Gangrene set up immediately, the ravage of which were so rapid, that by the 29th, a large portion of the palmar integuments had sloughed away and profuse hemorrhage set up from the palmar arch. This was arrested by forcible flexure of the forearm on the humerus.

August 30th.—Hemorrhage recurred, when I resorted to ligation of the brachial artery, in the lower third of the humerus. Improvement in the wound commenced in this case, also, from the day of the ligation; healthy suppuration occurred September 2d, (third day.)

September 3d.—Improvement considerable, granulations commencing at various points.

September 4th.—Erysipelatous flush supervened along the ulnar surface of the forearm. At this time special wards had been established in the hospital for the treatment of erysipelatous and gangrened patients; consequently he was removed from my immediate superintendence, but I frequently visited him in the gangrene wards. The erysipelas unfortunately soon assumed a phlegmonoid character, and very extensive sloughing of the integuments of the forearm resulted. What was very remarkable was, that this unfortunate occurrence in no respect interrupted the healing of the original wound, which advanced so satisfactorily that by the time the erysipelatous action in the forearm had given way to incipient granulations, the reparative process in the hand had become complete.

CASE 3rd.—*Private M. C.*, Company I, Sixty-first North Carolina regiment, wounded July 30th, 1864, sent to hospital the next day.

July 31st.—Gun-shot wound, point of entrance being in the

center of the rectus femoris, at the lower third of the thigh; exit on its antero-interior side, just where the femoral artery passes beneath the adductor tendon; wound already gangrenous.

August 2d.—Gangrene rapidly advancing, highly phagedenic in its character. Arterial hemorrhage at 2 P. M.

August 3d. Renewed hemorrhage at 8 A. M.

[So far the case had been treated by Assistant Surgeon Muldrow, who had held the hemorrhage in check by a compress bound firmly over the seat of the wound.]

I now took charge of the case. The sloughing from gangrene had advanced considerably above the original seat of the wound, and penetrated deeply through the substance of the extensor muscles, extending down to the septum, which separates them from the flexors.

I was considerably perplexed as to the treatment to be resorted to. In the first place, I was not satisfied whether the hemorrhage was from the femoral artery, or from some of its deep muscular branches; then, the tissues were so disorganized as to present a most discouraging task to the surgeon who would grope among them for the purpose of ascertaining the true nature of the lesion.

3 P. M.—I continued the compress till 3 P. M., by which time it became evident that this remedy was aggravating the gangrenous action. At the same time, I could not reconcile myself to removing it, without substituting some means of preventing future hemorrhage, the recurrence of which should, I was satisfied, prove fatal to the patient. I therefore determined upon an exploratory incision, with the purpose of operating "*pro re nata*."

I should mention, that at this time no pulsation could be felt in the groin of the injured side, though it was very strong on the other side, which led me at first to suppose that the entire artery might be obliterated by inflammation.

Operation.—I threw a tourniquet around the limb, pressing upon the seat of the artery, as near the pubis as could be effected. Then the dressings were removed from the wound—no hemorrhage followed; the tourniquet was gradually relaxed, and finally removed, without hemorrhage following; pulsation still absent in the groin; cut down through the diseased tissues to the artery, which was found flaccid and lacerated, though whether this was the effect of the original injury or of the phagedenic gangrene, there was no means of determining. All the surrounding tissues were in so advanced a state of decomposition as to be entirely undistinguish-

able; nor was I satisfied, until further pursuit of the operation, that it was the artery at all which I had found; artery or not it would evidently not do to tie it then. I accordingly made a careful dissection, tracing its course upward till I arrived at healthy tissue; then continuing the incision about an inch and a half further, arrived at the inferior angle of Scarpa's triangle, where I ligated the artery, in which, however, no pulsation could be detected; I then closed the wound, applied poultices to the gangrened portion, and aroused the patient. Ordered stimulating and sustaining diet.

The duties of a military surgeon, in charge of large numbers of wounded, are always laborious and harrassing, and perpetually impose responsibilities, painfully burdensome to a conscientious officer, and I do not think that I ever felt the weight of my responsibilities so oppressively as in this case. The absence of pulsation was especially a source of anxiety to me, as I could only account for it by supposing that the inflammation had extended so far as to obliterate the cavity of the artery in its whole length. It will soon appear that I was mistaken in this supposition, and with my present views of the effects of cutting off arterial supplies, I should not deem it so threatening a circumstance if it had been so.

I proceed with the history of the case:

August 4th. Appearance of the wound somewhat healthier; pulse and general appearance improved.

August 5th. Appearance still improved, strength renewed, pulse fuller. Phagedenic action had apparently ceased entirely.

August 6th. Healthy pus discharged freely; improvement continues.

August 7th. Pulsation perceptible in the groin for the first time since the third.

During this time the part already gangrenous had been sloughing off, and around the edges of the cavities thus left, granulations rapidly made their appearance, and soon after at various points in the bottom of the cavities. The wound healed more rapidly than any lesion of such extent that I had ever witnessed. The ligature came away on August thirteenth, or ten days after the operation, and in less than four weeks the man left on furlough, strong, healthy, and with his wound entirely healed.

Though it is rather a digression from my main subject, I will pause here to say a few words about the long continued cessation

of pulse in the artery from the seat of lesion up to Poupart's ligament. I think that the great contractile force of wounded arteries, is a thing but inadequately appreciated by systematic writers. When we consider the great force with which the blood rushes through the great arterial trunks, it is evidently a very powerful effort of the contractile elements in the arterial coats, which is required to resist the impetus of this stream, as in the present case, for four days.

I have preserved the records of a case in which this contractile resistance to hemorrhage was manifested at a point still nearer the center of circulation, and in which, unfortunately for the patient, we had to witness several alternations of contraction and relaxation, each relaxation being attended by profuse hemorrhage before the termination of the injury in death.

CASE FOUR.—A. E., private Company K. Forty-ninth North Carolina Regiment, was brought to the Fourth Division of Winder Hospital, July 30th. He had been wounded in the trenches, the same day, with a minie ball, which entered just in front of the trochanter major of left thigh, passed through the anterior muscles of the limb, through the root of the scrotum, and then grazed the anterior surface of the right thigh; its direction was transversely through the upper part of the thigh, etc., ranging from behind forward and a little upward. Profuse hemorrhage had taken place on the field, which was repeated in the hospital on the fifth, sixth and seventh, on the afternoon of which latter day he died. I was not called to him till after the hemorrhage on the sixth, when his vital powers were reduced so low, that an operation, such as alone could have arrested the hemorrhage, was out of the question, the wound having been too high for anything short of ligating the external iliae.

The intervals of arterial contraction between the hemorrhages in this case were as follows: Interval between first and second hemorrhage, six and one-half days; between second and third, seventeen hours; between third and fourth, twenty-two hours; between fourth and death, six hours.

On a post-mortem examination, it was found that the artery was much lacerated a little below its emergence from Poupart's ligament, but not entirely cut in two.

To return to our main subject: These are all the cases bearing upon the topic of this paper, of which I have authentic records. I have mentioned that I witnessed two others in wh

arteries were ligated with a similar result; but as they did not occur under my direct superintendence, the notes of them are included in the general report of the hospital, and do not occur in my private notes. I can only state generally, therefore, that the brachial artery was tied in both of them, with a result exactly similar to that in the cases already detailed—namely, the rapid amelioration of a morbid condition, previously existing in the wounded member, supplied by the ligated artery.

To speak in general terms, then: In the five cases witnessed by myself, and in the six cases reported by Dr. Campbell, we have this one uniform result, that immediately from the date of ligation, large tumefaction has been superseded by recovery of the original contour, fetid ichorous discharges by laudable suppuration, and phagedenic gangrene by vigorous granulations, resulting in rapid separation of the eroded tissues. And I would impress upon the Society, that these were not select cases, constituting a small per centage, or even a large proportion of the instances in which the antecedents were similar, and leaving a drawback of another certain per centage, in which the same antecedents were followed by different consequences. No, these cases comprise *all* the instances in the practice of Dr. Campbell and myself, in which the artery was ligated which supplied a member affected with gangrenous or otherwise morbid wound, and in *all* the same results followed.

It remains to be considered what are the practical inferences to be drawn from the facts thus detailed. If the cutting off the arterial supply be such an energetic remedy for gangrene, and the other events of inflammation, the question arises whether the procedure should not be adopted expressly for this therapeutical purpose. In all the instances I have given, though the ligation resulted in curing the gangrene, it was not resorted to for that purpose, but for that of arresting hemorrhage. In the present state of professional opinion, it would be bold surgery, savoring, perhaps, of rashness, to tie the brachial artery for gangrene in the hand, or the femoral for phagedenic erosion in the calf of the leg. Though my friend, Dr. Campbell, does not stop short of advocating this very procedure, I am not prepared, at present, to go these lengths, but I am satisfied that a surgeon would be justified in resorting to it, who should have a patient who was suffering under phagedenic gangrene, say in the lower part of the thigh, which threatened to involve the femoral artery in its ero-

sive career. In such a case, I say a surgeon would be justified in anticipating this catastrophe, in not waiting for the dangerous hemorrhage, but tying the artery at once. I should do so myself, and afterward look with confidence for an early amelioration in the condition of the wound.

The cases, however, on which the opinion is grounded, are only eleven as yet, and most men would be desirous of more extended observation before making any practical inference. The most conservative and cautious of surgeons, however, would, I think, assent to this proposition that the cases already recorded afford, quite sufficient ground for further observation. It will, I think, be conceded by all that every instance in which, for any purpose whatever, the artery is tied which supplies a gangrenous limb, the results ought to be carefully noted, recorded and published, in order that it may be seen whether future experience is in harmony with what has been herein stated."

Dr. D. L. Duvall, of Forks Elkhorn, Franklin County, Kentucky, prepared a paper in February, 1866, "On the Ligature of Arteries to Prevent Inflammation following Wounds of Joints," which was published in the *Cincinnati Journal of Medicine*, May, 1866. In this he reports the following case:

"After the battle of Chickamauga, September 19, 1863, a soldier received a gun-shot wound through the left leg. Ten days after the injury profuse hemorrhage ensued from the wound, with intense swelling. A watery discharge issued from the orifice, and the cuticle was of a deep, almost purple color, indicating extensive congestion, inflammation, and extravasation. I adopted Guthrie's mode of procedure, following the track of the wound until the orifice of the bleeding vessel came in view, which proved to be the peroneal artery close to its origin, so close as to preclude the idea of ligating the wounded vessel, thus necessitating the tying of the posterior tibial above the seat of lesion. The surgeon who assisted me was confident, from the condition of the limb and the cutting off of this source of supply, that mortification would follow, and the final result would be amputation of the limb. But, to our surprise, on the third day after the operation the swelling had almost subsided, healthy pus being discharged from the wound, while the cuticle assumed nearly its natural color, and in ten days more (twenty from date of injury) the patient had so far improved that he was able to be removed to the general hospital, at Richmond, Virginia. How this case ter-

minated I had no means of ascertaining, but from the favorable condition in which he left the Field Hospital, I am inclined to believe that speedy recovery followed."

Dr. Duvall remarks that his attention was first called to this subject during the recent war in a surgical journal published at Richmond, Virginia, under the auspices of Dr. S. P. Moore, Surgeon General of the insurgent States, in which the author stated "that he had performed operations on patients whose limbs, after being wounded, presented all the indications of rapidly approaching gangrene from inflammation, when, fortunately for the patient, extensive hemorrhage ensued, which necessitated the ligation of one or more of the large arteries of the limb, and to his great surprise, rapid improvement began and the patient recovered."

Although it was not our intention to quote European authorities in reference to the history of this method of treatment, we venture to offer an extract from Velpeau's great work on Operative Surgery, American edition, Vol. I, p. 679 (translated by Peter S. Townsend, M. D., with additions by Valentine Mott, M. D., and George C. Blackman, M. D., New York, 1856):

"As compression of the arteries moderates and even arrests the circulation in the organs situated underneath (beyond?) it seems, at first sight, to constitute an excellent remedy in congestions, engorgements and acute inflammations of all kinds. It is, therefore, somewhat surprising that physicians should, for so many ages, have omitted to make use of it, under this point of view. At the present time (1839) the mind appears to take another direction, and compression of the arteries, if we are to believe its partisans, should become the sovereign remedy in convulsions, epilepsy, inflammations of the limbs, wounds of the articulations, compound fractures, gout, rheumatism," etc.

Among the names of those who have tried and advocated the above method, he mentions Parry, Autenrieth, Troussseau, Liston, Dezeimeris, Earle, Boilau, Preston, Livingston, Kellie, Ludlow, Onderdonk, Watson, Malapert, Sestier, Rayer, and others. He adds, however, that he would not be understood as sanctioning the ligature of large arteries as a remedy in the above-named affections, but "inasmuch as we may have it in our power, by temporarily compressing those arteries which supply inflamed or congested parts, to moderate both the pain and the other symp-

toms of inflammation or congestion, I deem it proper to point out to surgeons the rules to be followed in this operation."

As the object of our paper is simply to render more complete the history of this method of treatment, we will not discuss its value. We should, however, feel reluctant to resort to the ligature, believing it to be a very serious operation, notwithstanding the extraordinary results in the hands of the late Valentine Mott and Professor Syme, the former having ligated the femoral artery fifty-three times with the loss of only two patients, while Professor Syme states that he has performed it thirty-three times without any bad consequences. (*Surgical Works*, edited by Dr. Maclean, p. 124.) The Edinburgh Professor believes that if the operation be performed with proper care, "there appears to be little or no danger." And at p. 128 he adds: "Though the ligature of the femoral artery is not attended with much difficulty, it is frequently followed by bad consequences. It has long been my conviction that these depend upon the operation being too easy, and, therefore, conducted without sufficient attention being paid to the circumstances above mentioned, in regard to exposing the artery and avoiding the veins." Now in reading his instructions for ligating the artery, it is difficult to discover in what respect he deviates from the course laid down in every modern work on surgery, viz., making a limited opening in the sheath, etc., and there are many who will coincide with us that the Edinburgh Professor is presuming much in supposing that he alone is competent to perform the operation according to correct principles. "By comparing Mr. Bryant's table (*Holmes' System of Surgery*, Vol. III, p. 404), it will be seen that the ligature even of the femoral artery, the lowest in this list, is almost as fatal as amputation of the thigh (27.27 per cent. of cases), while most of the others approach the mortality of primary amputation. These considerations show strongly the propriety of avoiding ligature of a large artery whenever there is any prospect of curing the disease by any other method." *Dr. Norris' Statistics of Ligature of the Femoral Artery*, published in the *American Journal of Medical Sciences*, October, 1849, corroborate all that has been stated by Mr. Bryant in reference to the serious character of this operation. Strange as it may appear, however, *Dr. Norris' Statistics* establish the fact that *gangrene*, although occurring in thirty-one out of two hundred and four cases, followed no operation except where it was performed for *aneurism*, yet Mr. Guthrie, in his

Commentaries on Military Surgery, makes the following statement: "Mortification of the foot and leg, and often of the whole limb, followed by the death of the patient, is a common occurrence after a ligature has been placed high up on the artery of the thigh in consequence of a wound, while it is not so common an occurrence when such operation is performed in the same place for an aneurism of several weeks' standing." In Mr. Guthrie's *Treatise on Wounds and Injuries of the Arteries of the Human Body*, published in London, in 1846, several cases are reported in which *gangrene* did occur after the ligature of the femoral artery for wounds. Other cases, also, are detailed, in which mortification followed the ligature of the external iliac and axillary arteries to arrest hemorrhage after the wounds of these vessels. In the *Nouveau Dictionnaire de Medicine et de Chirurgie Pratiques*, Paris, 1866, Vol. IV, pp. 365-6, we likewise find in the statistics of wounds of the axillary artery, by Eug. Bœckel, that *gangrene* followed the operations performed by Desault, Delpach, Larrey, Begin, White and Bœckel. In some of the cases the ligature was applied at the point of injury, and in others above the clavicle. In conclusion, it is proper to refer to the reports of the Surgeon General, United States Army, as to the very serious character of the operation of ligating the femoral artery. In Circular No. 6, we find that of one hundred and eight cases there were eighty-three deaths, and yet we are not prepared to deny that, in some of these operations, death was due to the nature or magnitude of the injury rather than to the ligature of the artery.

Medical Societies.

Cincinnati Academy of Medicine.

DR. J. L. VATTIER, PRESIDENT.

DR. R. E. PATTERSON, SECRETARY.

REPORT ON PARKS AND THEIR RELATION TO THE HEALTH OF THE CITY.

After disposing of business relative to reports of various committees, Dr. John Davis read the following report on converting Milcreek bottom into a Park:

To the Cincinnati Academy of Medicine :

Your committee on the question of the advisability of the conversion of Millcreek bottom into a public park, respectfully report, that viewing this proposition from a sanitary point alone, it is our decided conviction that this use of that land will prove of immense benefit to our city.

This tract, measuring hundreds of acres, lies so low that at every occurrence of high water in the Ohio river, the greater part, or the whole of it is overflowed. The consequence is, that in the dry season, poisoned emanations are given forth, from the soil, and the many stagnant ponds then existing. And the prevailing winds here being from westerly directions, they carry these noxious vapors directly into our midst; or, as is frequently the case, caused to rise higher by the warmer air of the city, they are wafted in the direction of Mt. Auburn, Clifton and Avondale.

Dr. Clendenin, our efficient Health Officer, has called attention to another source of atmospheric contamination in this valley, by reminding us that the sewers from the northern part of our city empty into Millcreek, and that this creek, in summer time, being tortuous and slow, the slaughter house washings and other refuse matter that are poured into its current, are often lodged along its banks. Putrefaction of these deposits, and the consequent evolution of deleterious gasses are inevitable results; and the stream itself, loaded with sewerage, necessarily emits mephitic effluvia.

Simple regard to making our city as healthy as possible, imperatively calls for the prevention of the inundation of Millcreek bottom, and also for the removal of the possibility of sewerage poisoning from that stream.

But it may be suggested that the very rapid growth of our city will eventually lead to the filling of this bottom; and that then the objections made will no longer apply.

To this we answer, that if this requisite grading is done with the materials which in that case must of necessity be used, the result to health will be other evils, which may prove even more serious than those which we now suffer.

The elevation of the surface of this land above the high water level, effected only as the demand for more houses will require, can only be accomplished by the continuance of the process now followed, of throwing into it materials mainly consisting of street scrapings and household refuse.

Ground thus formed will for a long time have a bad influence on health. But even admitting the propriety of such a course, it will take from twenty to thirty years to accomplish the object.

On the other hand, if it is decided to secure this valley for park purposes, a portion of the hill land adjoining it on the west may be included, in order to obtain suitable material for the grading. Earth from this source will be as free from objection as any that can be obtained. And the careful calculations of Judge Oliver, in his very able article on this subject, published in one of our daily papers about a month since, appear to show that the large amount of stone met with in the course of procuring material for the filling, will amply repay the cost of the work.

To effectually avoid contamination of the atmosphere from this region, it will also be necessary to cover the bed of the creek with an arch, as Judge Oliver proposes; or to do, what seems to us better, extend the sewers now opening into that bottom, so that they shall empty into the river below the city.

But there is another view of this subject that is even of more importance than that of which we have treated. It is the fact that the more vacant land a city contains the more salubrious will the city prove; provided, however, that the vacant spaces are properly situated for its ventilation, and of such elevation as will allow of good drainage.

This proposition requires little or no argument. The general fact, that a city suffers more from sickness than the country is universally admitted; and it is true of every city that its crowded parts are those in which the greatest amount of ill-health is found to prevail. Hence it is that among all enlightened people care is taken to have parks in their cities, or as near to them as possible, in order that the pure air of these open spaces may be mingled with the vitiated atmosphere of the crowded population, and render it less pernicious.

A park away from a city six or seven miles, more or less, as has been proposed for Cincinnati, can have no beneficial influence on its atmosphere, more than any farm or other country land of the same extent and similarly situated, already exercises. It is a great mistake to suppose that simply providing a pleasant place to visit will, in any considerable degree, improve the sanitary condition of a city, unless this place is in the city, or immediately adjacent to it, and on the windward side of the city, whenever the prevailing winds are from one direction.

As to Cincinnati, it is true that we already have possession of a tract of land to the east of our city, called the "Garden of Eden," and that it may be so beautified as to make it a very pleasant place of resort. But it is on the wrong side of the city for effecting any improvement to our atmosphere, except when the wind is from the east, which very seldom happens. And as a place simply for visiting, being hilly land, it is so difficult of access, that, even for this purpose it will be of comparatively little use to the mass of our people.

To improve the atmosphere of our city, it is necessary that the open land on which we rely shall be to our west, for from this direction are our winds.

Millcreek bottom, situated as it is, is just where a park will most improve our atmosphere. A park in this locality, besides contributing a large supply of pure air to our city, will prove a park for all our people, both the rich and the poor. Any person within our bounds will be able to reach it in a few minutes with little or no expense.

It may be made as beautiful as any park in the world, and therefore so attractive that throngs of our citizens will visit it daily. The visitors will not only have the pleasure afforded by a beautiful landscape, but also all the benefit to health to be derived from spending the same amount of time in any country place. The little children of our city will be taken there in large numbers, and, benefited by its pure air, a smaller mortality list from among them may be reasonably expected.

Viewing this question very carefully from a sanitary standpoint, we are strongly of the conclusion that Millcreek bottom is the only place worthy of thought as the site for an additional park for Cincinnati.

JOHN DAVIS, M. D.

JAS. GRAHAM, M. D.

THOS. CARROLL, M. D.

CHAS. WOODWARD, M. D.

WM. H. MUSSEY, M. D.

On motion of Dr. Heighway, the report was accepted.

On motion of Dr. Quinn, that this report be accepted as the sense of the Academy, it was passed promptly, without discussion.

Commercial Hospital.

Service of Prof. H. E. FOOTE, of the Miami Medical College.—Reported by JAMES T. WHITAKER, Resident Physician.

Orbital Aneurism.—Ligation of Both Common Carotids.

DENNIS CASEY, age 20; nativity, Ireland; occupation, laborer; entry, June 15th, 1867. States that last Christmas, while assisting in the erection of a house, a piece of timber fell from a height of fifteen feet, striking him upon the head and rendering him completely senseless, in which condition he continued for twenty hours, when he recovered sufficiently to be able to exercise his voluntary powers. Was told that while comatose, profuse hemorrhage existed from both ears, and from the nose and mouth, for the space of two hours. States that the scalp was torn by the falling timber and the skull fractured. After recovery from the shock of the accident, noticed a protrusion of the left eye-ball from its socket, with the same sensation therein as at present manifest. The protrusion subsided to a considerable extent after a few days, and then began gradually to enlarge to its present size. Conjunctival congestion was observed for the first time some three or four days after the accident.

Condition on Admission.—Robust, vigorous organic functions in every respect normal; a well marked depression two and one-half inches long by one-fourth inch wide, extending obliquely from a point an inch above the left frontal eminence backward and upward toward the vertex, marks the seat of injury. Mental faculties entirely unimpaired. The left eye-ball considerably protruded from the orbit, the vessels of its conjunctiva extremely engorged and tortuous. A serous effusion in the subconjunctival tissue at the outer canthus, a clear, distinct, well defined aneurismal bruit, synchronous with the pulsation of the heart, perceptible to the ear like the steam from an escape pipe, and impairing a peculiar tremulous thrill to the finger, noticed in greatest intensity at the inner and superior angle of the orbit, and extending two-thirds around the eye from this point. Bruit completely silenced by compression of the left common carotid. No pain experienced, merely a sense of inconvenience. Murmur audible to patient, more distinctly in the right ear, compares it to the sound of a steamer in the distance. Vision very slightly

impaired. Ordered absolute rest in bed, application of cold water to the eye. Digital compression of the left common carotid as long as it can be borne. Low diet.

June 19th. Digital compression has been maintained for an hour a day since the sixteenth inst., compression by Santorini's tourniquet for an additional hour. The Tourniquet causes considerable pain; pressure with the finger is well borne; Verat Virid tr. (Norwoods) has been steadily administered, holding the pulse at fifty and rather feeble. Very little if any change other than might be accounted for by the depression of circulation in the force of the murmur and thrill; general condition continues excellent. Treatment continued.

21st. Veratrum discontinued yesterday morning, and the pulse gradually increased in force and frequency, and is, this morning, sixty-four, of good tone.

An ophthalmoscopic examination to-day, by E. Williams, M.D., Ophthalmologist of Staff, revealed extreme congestion of the retinal blood vessels, which were enlarged and very tortuous. The optic papilla not well defined as to its limits and swollen. Gray patches of sub-retinal exudation at the circumference of which the vessels disappear to reappear on the other side. Some ten or twelve ecchymoses dispersed over the retina. A consultation of the surgical staff decided on ligation of left common carotid. Compression ceased.

June 22. Chloroform administered, and an incision three inches long, made along the inner border of the left sterno cleido mastoid muscle, middle of incision opposite pomum Adami. The communication of the internal with the anterior jugular vein being larger than normal and more curved, interfered somewhat with the operation; careful dissection, however, disengaged it, and it was held over to the outer side while the underlying tissues were divided, one by one, upon the grooved director; the sheath opened and the aneurism needle passed around from without inward without implicating the vein or nerve. The hemorrhage was moderate. Time nineteen minutes. After partial recovery from chloroform, it was found that the vision was unaffected. The thrill and murmur in the tumor completely stopped. Two hours after the operation the pulse stood at seventy-two; moderate force; tendency to somnolence; a return of the pulsation manifested about half its original force; patient not fully from under the influence of anæsthetic.

The wound was closed by three sutures and adhesive strips, leaving the main ligature dependent from the center.

Afternoon, 3 P. M. Thrill and pulsation in *stata quo*; no pulsation of the temporal or facial arteries can be detected; has vomited a little; at present feels perfectly comfortable.

Evening, 11 P. M. Thrill seems to be on the increase, still, however, far less force than originally.

June 23, 8.30 A. M. Slept but a little; pulse sixty-four; good tone; bruit and thrill unchanged; feebly audible to patient; general condition highly satisfactory; allowed light nourishment.

2 P. M. Thrill seems to have perceptibly diminished; pulse holds at sixty-four.

June 24. Some abdominal pain last night; bowels not moved for two days. In other respects no change worthy of record. Ordered Ol Ricini $\frac{1}{2}$ i.

11 P. M. Free evacuations followed, and pain ceased; pulse sixty-four; good force; Verat. Virid Tr. (Norwoods) gtt. iij every five hours.

June 25. Verat. repeated at 5 A. M.; no effect as yet observed, except a sick stomach and some headache; bruit and thrill as before.

June 26. Verat. given yesterday at intervals of three hours with no perceptible effect on the pulse. To-day, at 12 M., gtt v administered and repeated at 6 P. M.; pulse weaker this 8 P. M., n force, holds at sixty in frequency; bruit unchanged; general condition in every respect favorable. To continue gtt v. doses every six hours.

June 27. No effect on the pulse as yet manifested; interval decreased to four hours; wound united by first intention; main ligature in situ.

June 28. Verat. steadily continued; pulse still ranges from sixty to sixty-four good force.

July 1st. Veratrum discontinued day before yesterday, as vomiting ensued with vertigo and prostration. The bruit varies in intensity at different times. Allowed the liberty of the ward; full diet.

July 3. Bruit and thrill less perceptible in the morning before rising, varying during the day.

July 10. Main ligature still dependent; wound elsewhere com-

pletely united; no untoward symptoms at any time present; bruit unaffected; ex-ophthalmus and congestion continue.

Another ophthalmoscopic examination made by Dr. Williams after dilatation of the pupil. The retina presents much the same appearance as at first observed. The tortuosities of the enlarged blood vessels being very distinct, and just at the knuckles or angles an exudation of a whitish color.

July 14. Ligature came away yesterday before rising from bed, patient removing it himself. To-day complained somewhat of pain in the "center of the head;" thrill and bruit on the increase.

July 12. Consultation of surgical staff to-day decided on ligation of the other carotid, after full trial of compression, which was at once resorted to, but caused such severe pain as to compel its discontinuance after three attempts.

July 20. Ligation performed to-day in the presence of the staff and many visitors. Frequent interruptions were caused by the hemorrhage which was much greater than on the opposite side, necessitating the application of three ligatures to small vessels. The artery, when reached, was found to be almost twice its natural size. After the passage of the ligature, compression was exerted with a view to physiological effect. The pupils were not influenced nor was there any pallor of face. The thrill and bruit completely silenced; ligature brought home and incision closed as before. Five minutes after the operation, before recovery from the chloroform, a very slight bruit was perceptible. The thrill feeble but present beyond doubt; slight compression of the eye ordered, with absolute rest in bed, head low.

8 P. M. Nine hours after operation. Somewhat delirious, slight spasmodic twitchings of the muscles of the extremities; arose in bed once or twice and yelled vociferously; respirations at times, sighing. pulse 90, full and strong; compression of the eye attempted with the Spica bandage, but such distress caused as to compel its removal. Thrill very slight, almost none.

July 21. Rested comfortably, pulse 112, moderate force, still somewhat somnolent, though much more rational; vision in the affected eye perfectly nil, is unable, he says, to distinguish light and darkness; pupils somewhat dilated and respond feebly; in the unaffected eye vision is not impaired; face somewhat cooler than natural, not markedly so; the congestion of the eye in *statu quo*, though the vessels fill up more slowly after removal by

pressure; no thrill or bruit can be detected after a most critical examination.

July 23. Sutures removed to-day; a full injection of soap suds secured a free evacuation, relieving the constipation existing for three days; no return of thrill or bruit; tendency to somnolence.

July 24. Brighter to-day with less disposition to sleep; vision returning in the left eye; slight paralysis of left forearm; no return of bruit.

July 27. Suffered considerably from headache last night in the right frontal region. Potass. Bromid. gr. xxx, and full injection of soap suds gave complete relief. Paralysis of left arm continues; no movement of the fingers; frictions ordered; no thrill or bruit.

August 3. Ligatures of small vessels removed to-day. Good motion and sensation in left forearm; the protrusion and congestion continue; no thrill can be detected, though a slight pulsation is manifest at the inner canthus, bruit faintly discerned with Camman's Stethoscope; wound uniting kindly; full diet and the liberty of the ward.

Aug. 3. Ophthalmoscopic examination by Prof. Williams. "The swelling and opacity of the papilla nearly gone; vessels much straighter; exudation in retina at points of curvature disappeared, except slight traces at one or two points; numerous ecchymoses fading and undergoing absorption; all the engorged vessels readily and completely emptied by the least pressure on the eye, almost blanching the papilla; after the pressure is relieved, they again fill up."

Little or no change in condition or appearance; no pulsation in the arteries of the face.

Aug. 11. Main ligature removed this evening; wound uniting kindly; no pulsation in the arteries of the face, though the stroke of the inf. thyroid is readily perceived. The exophthalmus has slightly subsided, and the conjunctival congestion is not quite so marked. On making compression at the supra-orbital notch of the left eye and then relieving it, it is observed that a very small blood vessel fills and empties each time, as from a dilatation thereof, the compression checking the supply; vision in the affected eye is such as to enable him to detect the hour of the day on the clock, and to distinguish the fingers of the hands. With the unaffected eye, can read the largest print without difficulty, and recognize familiar faces at a considerable distance.

Aug. 21. General condition, in state of health. No change in the eye worthy of record. Insists on returning to labor. Discharged.

Of the twenty-three recorded cases, inclusive of carnochaus, late one of elephantiasis, in but eight was the interval within a month, though the cases of Parker and Warren, thirty-two and thirty-three days respectivley, as occurring before a full collateral circulation could have been established might be properly included. Of these ten, there were three recoveries, three failures in their object, one improved and three deaths. The first recorded operation of double ligation, is that of Macgill, of Maryland, in 1823, for tumors of both orbits. In 1844, Velpau performed this operation for aneurism of both orbits, with an interval of three months. Both instances successful.

The exceptionally small amount of cerebral disturbance renders this case of more than usual interest. The result may be stated in brief as complete relief of the aneurism, and with it of the liability to serious, and, in all probability, fatal hemorrhage from its rupture; and from the gradual improvement of sight from total abrogation to partial re-establishment, may we not justifiably entertain the hope of perfect restoration to vision and prospective subsidence of the disfigurement?

Surgical Clinic of DR. W. W. DAWSON—Reported by JAMES T. WHITAKER,
M. D., Resident Physician.

Hypertrophy of Clitoris—Removal.

MARTHA M—, aged forty-three; Virginian; married; four children; youngest four years of age; temperate and always healthy until about ten years since, when catamenia ceased. Admitted to wards of hospital September 9, 1867. She states that about four months since a small tumor appeared in genitals, which, at first, occasioned very little trouble, as it was unattended with pain and did not interfere with micturition. Tumor always of its present character, increasing gradually to present size. Has always led a regular life, but contracted syphilis from her husband, for which she was treated seven years since. No secondary symptoms have as yet appeared.

Condition on Admission.—Enfeebled; cachectic, tongue clean;

appetite poor; bowels constipated; voids urine freely; skin harsh and dry; pulse rather feeble; no intrathoracic disease apparent. A large tumor occupies and extends above the sinus pudoris; solid in texture, of cartilaginous firmness; smooth and rounded or ovoid above; modulated and fissured below; transverse and longitudinal circumference, each six and a quarter inches; diameter two and a half inches. Prepuce of clitoris elongated, inflamed and inferior margins ulcerated. There is a purulent, fetid discharge from ulcerated surfaces. Per vaginum: walls of vagina relaxed and moist; cervix uteri in normal position; is somewhat indurated; no ulceration detected. She was ordered Tinct. Cinchona Comp. 3ss, Tinct. Ferri. chl. gtt. x, ter in die; eggs, milk, steak, and bottle of ale daily.

Sept. 15. Condition improved; anodyne required at night to procure sleep; bowels regular; appetite good; tumor unchanged. Ordered Sol. of Borax (5i to 5j) as a wash three times a day, after which its surface is to be dusted with Hydrarg Chl. Mit.; lint to be interposed between ulcerated surfaces.

October 10. Still improving; treatment, both external and internal, continued; tumor has somewhat decreased in size; ulcerated surfaces on pedicle and nymphæ about healed.

Oct. 12. The patient was brought before the class to-day, and the tumor was dissected from its attachment to the pubes. The actual cautery had to be used to control the hemorrhage. The wound was plugged with persulphate of iron, a T shaped bandage applied, and an opiate administered.

Previous to his operation, Dr. Dawson remarked as follows: What is the nature, gentlemen, of this growth? Is it malignant? It has not the hardness, the stony hardness, peculiar to schirrus, nor does it show a disposition to invade surrounding structures. Pain, keen, sharp, lancinating pain, not constant but occurring at intervals, preventing sleep, destroying appetite, and gradually wasting the strength is the uniform attendant of cancer, but in this case we have here almost entire immunity from suffering. From its size and situation it is a source of inconvenience alone.

A moment's inspection will show you that it is not encephaloid, as it is not brain-like in consistence or appearance it is not vascular and of high vitality, nor of unequal consistence, as is sometimes the case in soft cancer.

It presents none of the characteristics of melanosis colloid or epithelioma. The history of this woman shows that she has had

constitutional syphilis, but this tumor presents no evidence whatever that it is a part of that disease. I regard it simply as a case of hypertrophy of the clitoris, or an outgrowth from the rami of the pubes, embracing in its neck the clitoris.

Oct. 13. Slept well; no secondary hemorrhage; bandage not removed.

Oct. 14. Bandage removed; compress and persulphate allowed to remain.

Oct. 22. Plug came away to-day; no hemorrhage; surface healthy.

November 9. The patient discharged.

Prof. Bartholow furnishes the following description of the tumor:

DR. W. W. DAWSON, SURGEON TO THE COMMERCIAL HOSPITAL: The tumor removed by you from the vulva, October 12th, consists of two principal portions or lobes, united near the pedicle. The superior lobe is the larger. The antero-posterior diameter of the tumor, including the pedicle, is two and a half inches, the vertical diameter is two inches, and the transverse diameter is three-quarters of an inch. It has been forced into this shape by the lateral pressure. When first removed it was larger.

The tumor is smooth exteriorly but is marked by a deep depression between the two lobes. The pedicle is uniform in size and shape, being one inch in the longitudinal and in the vertical diameters, and a half inch in the transverse diameter. The body of the tumor is more elastic than the pedicle.

Making a section parallel to the long diameter the interior is seen to be white, uniform in structure, and presenting the appearance of white fibrous tissue. A quantity of fluid flows out along the line of the incision. A drop of this fluid examined under the microscope, is seen to be entirely free of morphological constituents, except an accidental blood globule. It coagulates on boiling, and furnishes an abundant precipitate with the nitrate of silver. For these reasons I consider it nothing more than the serum of the blood.

I have examined sections made through various parts of the tumor, mounted in the glycerine solution. The covering is found to be mucous membrane, and the body of the growth is made up of connective tissue having wide interspaces and remarkable for the abundance of the plasmatic cells.

ROBERTS BARTHOLOW, M. D.,
Pathologist to Commercial Hospital.

Laceration of the Perineum—Baker Brown's Operation.—Cure.

M. O'C—, aged twenty-five; Irish. She was delivered of her first child about three weeks since. Her attending physician states that the labor was natural, but that the second stage was very short and rapid, the head of the child being driven through the perineum, tearing it from the posterior commissure to the sphincter ani. An attempt was made to repair the damage by keeping her on her side, cleanliness, etc., but with no success. The patient was chloroformed and placed in the ordinary position for lithotomy. The edges of the rent were freshened and brought together by three quill-sutures inserted deeply, the skin in the median line was united by several interrupted sutures and the sphincter ani divided on both sides. She was placed in bed with her knees tied together; cold water dressings were applied to the wound, one grain of opium given every six hours, and once in four hours the urine was drawn by the catheter. On the third day after the operation the deep sutures were removed; the wound had united throughout its entire extent.

Baker Brown removes his sutures at the end of forty-two hours, and this case illustrates the wisdom of his course, particularly in persons of low vitality. On the third day there was already ulceration under the quills, and considerable suppuration in the track of the threads.

Upon this case Dr. Dawson remarked, that the operation for lacerated perineum, now generally known as Baker Brown's operation, consists of three steps: 1st. The division of the sphincter ani on both sides. 2d. The vivisection of the sides of the rupture. 3d. The introduction of the sutures, the deep quill, and the superficial interrupted. In recent cases, that is where the operation is performed immediately after the accident, the second step, the vivisection is unnecessary.

In the after treatment, Mr. Brown recommends two things which are of vital importance to success, viz., the closure of the bowels by opium for several days, and the evacuation of the urine by catheter every four or six hours.

Almost all surgeons now agree that the earlier the operation is performed the better.

Laceration of Perineum Involving Sphincter Ani and Recto-Vaginal Septum—Baker Brown's Operation.—Partial Success.

S. J.—, aged twenty; nativity, Virginia; prostitute; entry October 26, 1867, in convalescence from parturition, which resulted in miscarriage at four months. A frequent denizen of the syphilitic ward. Lymphatic temperament prostrated by post-partum hemorrhage and a life of debauchery; severe osteoscopic pains. An extensive laceration of the perineum involving the sphincter ani and implicating the recto-vaginal septum to the depth of an inch, the result of a labor at term two years ago. Profuse cervical leucorrhea; incontinence of fæces. Alteratives and nutrient regimen ordered.

November 2. General condition considerably improved. Leucorrhæal discharge lessened. Chloroform administered and the borders of the cloacum pared in its entire extent; edges of the septum apposed and retained by three deep-quilled sutures; sides of the integument likewise brought into juxtaposition with several silk sutures, after which the sphincter ani was completely divided obliquely backward, permitting considerable relaxation of the tissues rendered tense by approximation; limbs tied together; opium freely to control the bowels; catheterization of the bladder several times a day.

Nov. 6. Quill sutures removed to-day. Wound gapes a little posteriorly. Bowels locked.

Nov. 10. Sutures of integument withdrawn; union firm anteriorly; sides of septum have separated somewhat, making a fistulous communication at upper margin of wound. Bowels moved by Ol. Ricini ʒss. Opium discontinued; local treatment of leucorrhæa resumed.

Nov. 26. Insists on leaving the house; promises to return soon and undergo another operation.

Excision of Nymphœ.

E. M.—, aged twenty-two; nativity, Cincinnati, courtesan; a frequent inmate of syphilitic ward; oscillates between the hospital and the street. Entry November 22. Chancres and profuse cervical leucorrhea; ecthymatous eruption on face, forearms and back; indurated glands everywhere; Hypertrophy of both nymphœ, the right as large as the labium majus, the left half as large

Carunculae enlarged to such an extent as almost to prevent the ingress of the speculum.

December 7. Complications subsided under appropriate treatment, leaving the hypertrophied labia minora in condition described. General health excellent. Operation for removal performed to-day. Each nymphæ elongated and curved scissors introduced close to its base; excision complete; carunculae also removed. But one small branch required ligation; hemorrhage moderate; cold water dressings; wound allowed to heal by granulation.

Dec. 25. Eighteen days after operation cicatrization nearly complete. No untoward symptoms. Deformity entirely removed.

Service of Prof. MENDENHALL, of the Miami Medical College.—Reported by A. GUTHRIE, M. D., Resident Physician

Amenorrhœa.

GENTLEMEN.—I present to you this morning, for consideration, a case of *amenorrhœa* from the wards of the hospital. The term amenorrhœa is a general one, and is applicable to any case where menstruation does not take place between the ordinary age at which it occurs, and the period of life at which it ceases, or, as an average, between the fifteenth and the forty-fifth year of age, when not produced by pregnancy. The function may be considered as complementary to the other general functions of the body, being the last to be perfected and the first to fail from natural causes. It consists, essentially of the maturation of one or more Graefian vesicles of the ovaries; and the bloody discharge from the uterus at this period as merely the outward manifestation, that ovulation or the maturing and throwing off of an ovule or ovules is taking place, whether we consider it to be a secretion from the lining membrane of the uterus, or a periodical hemorrhage, as the result of the hyperæmia of the pelvic organs during ovulation. Girls have become pregnant who have not menstruated, but they must necessarily have ovulated, for without an ovule is formed there can be no pregnancy. Women sometimes after parturition, and while nursing, become pregnant, who have not menstruated, as shown by the absence of external emissions of menstrual blood. Ovulation may occur in women who are actively employed mentally, and yet not have the sanguineous discharge.

The absence of the menstrual discharge may probably occur

from other causes, and ovulation take place, besides those named. In these cases the health of the female is not likely to be so much affected. The *causes* which may prevent or suspend the menstrual process are various, and must be considered carefully if we would prescribe for amenorrhea intelligently or successfully. It can hardly be considered of itself as a disease, but an effect of various pathological conditions, although it may in turn produce injurious effects on the system.

It is well known that the remedies used for this condition often result unsatisfactorily. The class of remedies known as emmenagogues, used as such, seldom cure the patient. I would almost say they ought to be expunged from the *Materia Medica*. It is only when we carefully ascertain the cause or causes of the want of menstruation, and give our attention to relieve them, that we are successful in curing amenorrhea. When these obstructing conditions are removed, the function will be resumed generally without the remedies known as emmenagogues. The idea in the public mind is that we have remedies which, if applied by a physician who understands his business, will at once restore the catamenial discharge, and he who fails to do this promptly, is ignorant of the *specific* remedy to accomplish it, no matter what irremediable condition may be the cause of its suspension.

Let us glance at some of these causes. Amenorrhea may be caused by general torpor or want of activity in the system; by absence of or faulty formed uterus, in which case we may or may not have a discharge of bloody mucus, but not the proper menstrual discharge. The cervix of the uterus may be contracted, which condition, however, is more apt to produce dysmenorrhea than amenorrhea. Even should this cause exist, it may not always be necessary to incise the uterus; a practice which with some very eminent practitioners has, in my opinion, become, at the present time, fearfully and unnecessarily prevalent. Other means of dilatation are safer and often efficient. If incisions in these cases are not always necessary, there is certainly still less reason for the excessive raids upon the uterus that we often witness. I wish clearly to say, however, that I will not for one moment deny but that cervical incisions are sometimes useful and even imperatively demanded.

Ulcerations of the os uteri may be a cause which must have the appropriate treatment. Inflammation of the cervix and os with or without endo-metritis must be recognized as a condition

upon which an arrestation of ovulation and menstrual discharge may be produced. Hyperæmia of the body of the uterus, whether congestive or inflammatory, acute or chronic, and abraded or ulcerated at the os, and internally or not, may also be a cause. A diseased condition of the ovaries, whether inflammatory or congestive, acute or chronic, and structural enlargements and neuralgia also, of these organs may be a cause. It may depend upon closure of the vagina whether pathological or congenital.

Another frequent cause which may or may not be associated with other causes is that of chlorosis or anaemia. In these cases there is wanting the stimulating qualities of the red corpuscles and the material pabulum, the albumen of the blood, which are replaced by an increased proportion of the watery elements, producing that condition which is known as hydraæmia, or in cases of excessive changes as hyperhydraæmia. While there may be a difference between anaemia and chlorosis, in this connection, we will consider them as belonging to the same class of causes. The essential condition exists in both which saps the foundation of all the powers of the system, and renders menstruation impossible or imperfectly performed. Cutaneous eruptions may also be another cause by revulsion and general disorder, of a cessation of the catamenia. These are at least some of the causes which may require to be considered before we prescribe for amenorrhœa intelligently; and just in proportion as these causes can be discovered and relieved, will be our success in treating the disease of the patient before us. The practical question primarily then in this case is, what is the cause or causes of the amenorrhœa; and secondarily, the rational treatment to be pursued. You will now listen to a brief history of this case as recorded in the case book of the hospital.

M — D —, æt. 21; Nativity, Ireland; servant. Admitted January 4th, from medical ward in which she has been treated for typhoid fever. Last August was treated in this house for an obstinate attack of jaundice, from which she ultimately recovered, but was left much debilitated. Has had her catamenia but once since, and that was just previous to the above mentioned attack of fever. Has had a slight whitish vaginal discharge since first disappearance of menses, and for two weeks has been suffering from pains in back, extending down the thighs.

Present Condition.—Enfeebled and anaemic, as evidenced by her movements, pallor of lips, countenance, etc.; pulse one hundred and

weak; tongue slightly coated; appetite fair; bowels regular. Abdomen somewhat enlarged and tympanitic. An examination per vaginam by touch, indicates the neck of the uterus to be slightly enlarged, pointed and indurated, and the vagina somewhat relaxed. A speculum examination reveals redness and slight abrasion of os tineæ.

R.—Ext. Nucis Vomicæ, 3*i*,
Pulv. Ferri, 3*i*,
Quiniæ Sulph. 3*ss*,
Ft. Pil. xxx,
S. one ter in die.

Jan. 9. A thorough application of the crayon of nitrate of silver was made to the os to-day. General treatment continued.

Jan. 13. Nitrate of silver not having acted very favorably, she was ordered the following:

R.—Acid Tannic. 3*ii*,
Glycerinæ, 3*i*,
Morph. Sulph. grs. **iv**.
Ft. Sol.

Apply to the os on lint saturated with the remedy, through speculum daily. General treatment continued. The vagina to be syringed with cold water every morning after removal of the lint.

Jan. 16. General health, as well as local trouble, have been steadily improving since last report. Treatment continued.

You will, by the record, observe that the patient has had the group of symptoms known as jaundice, the pathology of which is not always very clear; but in all cases there is one condition that is uniform, viz.: there is disease of the digestive organs which materially interferes with digestion, and consequently with haematoses and nutrition, from which she has never fully recovered. More recently she has had an attack of typhoid fever in the hospital, and from which she was just recovering when she came under my notice two weeks ago. Here is one cause of failure of menstruation which is quite apparent in this case, viz.: that of anaemia, and for which the iron, quinine and nux vomica, were ordered, and have been very beneficial, as the patient is already much improved. From the excited condition at present, on being brought before the class, this anemic condition which was so very marked two weeks ago, and continues to some extent, can not

be shown. You will therefore have to rely upon the condition of the case as recorded in the hospital books for the evidences of anaemia. As you will observe by the record of the examination with the speculum, we found the os inflamed and abraded with the chronic inflammation extending into the uterine neck, which is an additional cause for the amenorrhea. For this condition the stick of nitrate of silver was applied around the lips of the os and into the cervical canal for about one inch. The effect of this seemed to increase the inflamed and abraded condition of the part, which the nitrate of silver sometimes does. However valuable this remedy is in most cases of ulceration, abrasion and inflammation, it sometimes seems not to benefit these conditions, or indeed for a time increases the difficulty. In such cases, and it is now being applied daily in this one, I use a solution of Tannin $\frac{3}{4}$ j to $\frac{5}{4}$ j, and Sulph. Morph. grs. iv and Glycerine $\frac{5}{4}$ j, to be applied through the speculum daily by a small ball of cotton or lint saturated with it. A string is tied to the cotton or lint and removed every morning, when the vagina is syringed with water and the remedy reapplied.

The local application of glycerine will usually produce a profuse watery discharge, and acts, to some extent, as depletory, while the tannin and morphia relieves the congestion and tenderness of the uterus, and disposes the parts to take on the recuperative process. The local condition is improving, and we have but little doubt that this course of treatment will result in health to the patient.

Correspondence.

PARIS, December 10, 1867.

DR. JOHN A. MURPHY:—*My Dear Sir:*—Your very interesting letter reached me at Prague, and should have been answered sooner, but time to put facts into a proper form to be at once interesting and instructive has been wanting and has not even yet appeared.

Two months in attendance at the obstetrical department at Vienna, and the same length of time at Prague, will give one an

estimate of the opportunities offered at these cities for studying practically this branch of medicine and surgery. There are eight thousand births annually at the general hospital at Vienna, in the divisions under the care of Profs. Braun and Spath. From the first of January, 1867, to July 31st, there were admitted into Braun's division two thousand five hundred and thirty-one cases. This, it will be seen, is below the average, which is from four thousand eight hundred to five thousand annually, and is accounted for by the fact of the same being always more admitted during the latter months of the year.

During the months of June and July, sixty-one days, there were six hundred and twenty-seven cases of accouchement. Of these, eight cases were twins; twenty-eight cases were miscarriages; abortions seven; placenta prævia two; prolapsus of the cord five; presentation of the face five; presentations of the breech twelve; ruptures of the perineum twenty-one; forceps cases thirteen; episotomy thirteen; craniotomy two; haemorrhage post partem twelve; eclampsia two; tetanus uteri one; hydrocephalus one; incisions of the os uteri one; deaths nine; at least one-half above the average number of the latter one, was from scarlitina; one from pelvic abscess; one from erysipelas; one from pleuritis; and five from metritis and peritonitis. When cases convalesce favorably, they are retained at the institution only nine days; unfavorable cases are retained longer.

There are about three thousand births annually at the obstetric institute, at Prague, including the three divisions for physicians, for midwives, and the divisions for private patients, to which students are not admitted. There had been admitted to the two first divisions from January first to August thirty-first, sixteen hundred and eleven cases. Of these, three-fifths were sent to the first, and two-fifths to the second division.

During a period of sixty-one days, commencing July twenty-ninth, and closing September twenty-seventh, there were one hundred and eighty-nine cases of accouchement in the first division; ten cases of twins; therefore one hundred and ninety-nine children born. Of these (one hundred and eighty-nine) cases, there were contracted pelvis fourteen; miscarriages twelve; face presentations four; placenta prævia one; forceps cases ten; craniotomy one; hemorrhage post partem, four; there was but one death during that period, that was a case delivered early in July. This is certainly a very favorable record.

The building is situated on high ground, having a rapid descent toward the west and south. The wards are not crowded, and much attention is given to ventilation so far as can be accomplished by the doors and windows.

A new building is being erected near the site of the old one, having a capacity of nine hundred beds, and having ventilation throughout, according to the method of Dr. Behm, of Vienna, which has also been adopted in the obstetrical department at the latter city, as well as in the new Rudolph hospital at the same place, which latter is much the finest structure of the kind I have yet seen anywhere.

After the morning lecture from eight to nine o'clock, the wards are visited and every patient is seen, thus giving the students an opportunity to observe the convalescence, and to note any abnormal symptoms that may arise. At Vienna only special cases are pointed out. Prof. Syfert has some peculiar views respecting the "puerperal condition." He believes puerperal fever to have its foundation in anaemia. The cause he does not pretend to know, but believes it varies from day to day, being much more active on some days in the same week than on others.

At the first appearance of febrile action after delivery, sufficient to indicate that the patient is "puerperally sick," he orders a mild cathartic, provided there is not already diarrhea, which is frequently the case, then he prescribes acid drinks, but nothing to affect the diarrhea one way or the other, for he believes it is by that means the poison is eliminated from the system.

Another point in which he differs from many is in not artificially inflating the lungs of the child in any case. He says it is confounding the effect with the cause to suppose that the absence of respiration is the cause of insensibility of the brain and nervous system generally, rather than putting the want of irritability, or insensibility as the cause of absence of respiration. If the trachea be filled with mucus it would be equally injudicious to attempt inflation. In many cases, in which it is performed, he thinks the lungs are injured and the child dies in a few days of pneumonia. He uses, as excitants, warm water, cold water, irritation of the nares and fauces with a feather, brisk rubbing of the chest, smart blows on the buttocks with the open hand, grasping the chest somewhat firmly between the thumb on one side and the fingers on the other, then suddenly withdrawing the hand, the thumb passes over the ribs of one side, and the fingers over those

of the other, thus producing a sudden but transient compression, and, perhaps, irritation, which I have seen followed immediately by respiration in a number of cases. He is a man of vast experience, independent thought and good judgment. He may or may not be right in this question of inflation—that I am not discussing. At Vienna artificial inflation is used.

It is interesting to study the state of society in Bohemia in reference to marriage. From the official records, there are born in that kingdom, having a population of about five millions, thirty-two thousand illegitimate children annually. From fifty-five to sixty per cent. of the children sent from the obstetric institute (where nearly all the children borne are illegitimate) to the Findal House, (Foundling Hospital) die before they arrive at the age of ten years. The law provides that children shall be sent to school five years, from the age of seven to twelve, but the law is not enforced, and, as a consequence, many of those who live to the age of manhood are very ignorant, presenting a striking contrast with the poorer classes of Prussia.

The clinics of Prague are very rich in all departments. Patient are brought there from all parts of the kingdom. I have seen in the ophthalmic department six cases of extraction of cataract in a day by Prof. Hasner. To mention incidentally, he always makes the section of the cornea downwards, and after having removed the lens in the ordinary manner he makes a puncture in the center of the posterior capsule directly into the vitreous body. This method he has been practising for about four years, and his success is about ninety-five per cent. Gräfe's operation he has tried in a number of cases, but has abandoned it himself and advised against it. A number of other operators in Germany, I learn, have also abandoned it. Prague has furnished many eminent men in the medical profession, among whom are Rokitansky, Scoda, Engel Scanzioni; and there yet remain these able men, Purkinje, Muschke, Hasner and others.

H. Z. GILL.

BOSTON, MASS., January 8, 1868.

EDITORS LANCET AND OBSERVER:—The Twenty-fourth Registration Report, for the year 1865, relating to the return of Births, Marriages and Deaths in Massachusetts, is worthy of a moments notice, and I herewith transmit as brief an analysis as possible of the more important facts.

The Report covers some 80 pages of editorial observations from the pen of Dr. George Derby, of this city; and one hundred and sixty pages of statistical tables, compiled at the office of the Secretary of State. In speaking of the object of the Report, Dr. Derby says: "Many will ask themselves, 'What is the practical benefit to be derived from these figures?' It is the knowledge of human development in communities, subject to many influences promoting or retarding their growth and welfare. These influences may be changed by public opinion, and by legislation. Exactly what they are may be suspected, but cannot be demonstrated, except just in this way. This is not a work, the full measure of whose results can be clearly anticipated. Much we already perceive, but very much is yet to be made clear by the patient accumulation of facts, in a long series of years. Within the recollection of the present generation, improvements in physical well-being have been made, which should lead us to search eagerly for others equally beneficial; and in no way is the clew to them so readily to be found as in the mass of facts contained in these and similar reports."

The obligations of a true philanthropy are not answered by a relief of suffering, but require that it should be anticipated and averted. The observations which, during the past quarter of a century, have been made in various countries of Europe, as well as in Massachusetts, clearly prove, that many calamities which, in a less enlightened age would have been regarded as a part of man's inevitable destiny, are preventable by improved social arrangements. What duty can be more imperative than to endeavor to discover those noxious agencies which shorten our lives and limit our happiness?"

Although the war terminated in 1865, yet for the first five months in the year, the State had as many men in the field as at any former period; and hence there were the same disturbing influences to derange the relations of births, marriages and deaths, as in previous years of the war.

The number of names registered during the year was 82,505. These were divided as follows: 30,249 children were born alive; males 15,659, females 14,590; there were married 13,052 couples, of these 7,814 were purely American marriages, and 5,238 were marriages either of foreigners exclusively, or in which one party was foreign; and there were 26,162 deaths, males 13,107, females 13,045. A comparison of these numbers with those of 1864, shows

a decrease of 200 births; an increase of 528 marriages, and a decrease of 2,571 deaths, presenting some indications of a return to the usual relations that existed before the war. The excess of births over deaths was only 4,097. This is better than the preceding year by 2,371.

The population of the State being 1,267,059, one living child was born to every 41.89 persons; one person was married in every 48.54; one person in every 48.45 died. The average number of births daily was 82.87; daily marriages 35.76 or 71.52 persons; daily deaths 71.65. The percentage of births was 2.387; persons married 2.059; deaths 2.064. The excess of birth-rate over death-rate was .323 of one per cent. The correspondence is very near. The excess of deaths of males over females, 61. In 1864 it was 1,266; in 1862 it was 8.22; while in the ten preceding years the deaths of females exceeded those of males.

The average age of those who died was 28.68 years, an increase of .38 of a year over 1864. The lowest average was in Suffolk County, being 24.24.

But let us pursue these return rates separately. From 1860, there has been a steady decrease in births, except in 1864, amounting in the State to 16.18 per cent., which is explained by the absence from the State of so large number of men serving in the army and navy. If we include the still-born, there was one birth to every 40.73 persons. As in previous reports, the births were more numerous in proportion, in counties containing crowded towns, and a large foreign population. This is owing, in part, to the emigration of young people from farming towns, to cities and to other States in the West. It is a singular fact that the number of births occurring in the various seasons, is in a nearly constant ratio in the same county. This depends not upon physiological causes, as in the lower animals, but upon custom, religious observances and occupation. For the first quarter, the per centage was 2.249; second, 2.212; third, 2.552; fourth, 2.535. The proportion of males born alive was a little larger than usual: while the still-births show, as in previous years, a very large preponderance of males. Among illegitimates, females, as in former years, all in excess—why it is so is not easily explained.

All these facts show the superior fecundity of the Celtic race over the Anglo-American race. The difference between the births of purely American parentage, and those of purely foreign parentage is, 854 in favor of the latter. Between Ameri-

can and mixed, 3,260; although, in 1860, the native population of the State was 970,952, while the foreign population was but 260,114. The results of this increasing change in the character of our population is a subject of deep interest.

Two hundred and eighty-eight women gave birth to twins, and five to triplets, making 591 plural births; 42.47 per cent. were of American parentage; 48.40 foreign, and 9.13 mixed. All of the triplets were of foreign parentage, except one. For the last ten years there were 3,211 pairs of twins, and 32 cases of triplets; or one case of twins to every 104 births, and one case of triplets to every 10,453 births.

There were 271 illegitimate children born; 145 of native maternity, and 116 foreign; giving one illegitimate child to every 112 births.

The number of still births reported was 859, three more than the previous year. The percentage of still born to the whole number of births is 2.76, or one to every 36 *marriages*. The increase of marriages in 1865 was owing to the close of the war.

The percentage was greater than the average for the seven previous years by 1.655. For 1865 the percentage was 1.030 to the population. The largest number, as usual, occurred in November, the month of our annual "thanksgiving." The smallest number in March, compared with the previous year, there was an increase of 409 males and 429 females marrying under 35; and for seven consecutive years it appears that there has been a disposition of males to marry later in life. Fifty-two persons of 70 years and upward were married in 1865; 49 males and 3 females; Suffolk County, the most densely populated, shows the highest marriage rate.

The average age of men marrying was 29.6; that of women, was 25. The average age at first marriage of men, was 26.4; of women, 22.8. Of 10,388 bachelors who left the state of single blessedness, 92.56 per cent. married maids, and 7.44 per cent. widows. Of 2,384 widowers remarrying, 1,444 chose maids, and 940 widows. Of 1,728 widows, 788 married bachelors, and 940 widowers. 35.76 per cent. of the widows re-marrying were under 30 years of age. The average age of widows marrying bachelors was 30 years; marrying widowers 39 years; of widowers marrying maids 39 years; of widowers marrying widows 47 years. There is an increase percentage of women marrying a second time, which may be owing to an unusual number of young widows, caused by the loss

of life in the public service. Fourteen males were married at the age of 17; 50 at 18, and 134 at 19; while one female was joined in wedlock at the age of 13; 1 at 14; 31 at 15; 124 at 16; and 350 at 17. There occurred the *fourth* marriage of 18, and the *third* of 230 males. Of females, 2 only were married the *fourth*, and 68 the *third* time; while 2,136 males and 1,658 females were united the *second* time. Only one *fifth* marriage is reported, that of a widower of 58 to a widow of 50. The most remarkable marriages of the year were those of a male of 17 to a bride of 13, and of a bachelor of 85 to a youthful maiden of 65.

For the four years 1862—5, the figures give a steady increase in the foreign, and a diminution in the native marriages; and there seems to be an increase in the proportion of foreign grooms and American brides intermarrying.

Deaths.—As before stated, the number of deaths registered was 26,162, aside from the still born 859. This is greater than the average for five years, by 1,008. The statistics exhibit the comparative healthfulness of different sections of the State, while 24 in a 1,000 died in Boston, only 18 in 1,000 died in the western division of the State.

The mortality of the seasons, or months, stand about the same as in previous years, in the following order: September, August, October, March, July, April, February, January, November, May, December and June. The proportion of male to female deaths was as 100.47 to 100; in 1862 it was 107 males to 100 females; in 1863, 109 to 100; in 1864, 109 to 100. For many previous years the proportions were about 100 males to 101 females. The proportion of male death greatly diminished in 1865, thus restoring the normal relation of the sexes, as reported in the mortuary tables of previous years. Between 18 and 19 per cent. of all deaths occurred under one year of age, and about 36 per cent. under 5 years. As the average age of all who died was 26.68, so the average age of all who died over twenty years of age was 51.6. Thirteen persons (an unusually large number) died with ages ranging from 100 to 107 years; 9 were females and 4 males; 11 married and 2 single. Upon the question of deaths among persons of American and foreign origin, the returns seem to demonstrate that the mortality among the foreign class is as excessive as their fecundity.

Causes of Death.—The weather is noted in connection with the public health. Tables are introduced showing the hygrometric

condition of the atmosphere in England and this country. Happily there was no very marked epidemic influence abroad, as destructive to life in some diseases, as has been in some former years. The percentage of zymotic disease was 31.20. The percentage of constitutional disease was 24.84, or about the usual average. Tubercular disease, including consumption, was 20.74 per cent. being 3.36 per cent. less than the average for twenty-four years. The percentage of local diseases was slightly in excess; also those of developmental character. There was a marked decrease in violent deaths. Eighty-six males and 16 females lost their lives by railroad accidents; 57 males and 21 females committed suicide; there were no judicial executions in 1865; 2 men were killed by lightning; 9 men and 2 women were the victims of murder; 2 died from excessive cold; 14 men and 3 women from excessive heat; and 19 persons from poison. The order of fatality of the leading diseases change from year to year, and 1865 is no exception to this rule. They stand in the following rank in regard to fatality:

Consumption always heads the list. There were 4,661 deaths; males, 2,126, females, 2,533; or in proportion 100 to 119. The percentage of deaths from this disease to deaths from all causes was 17.69. By seasons the order of fatality stands, Summer, 27.7 per cent.; Winter, 25.3; Spring, 23.8; Autumn, 23.2. This is unusual, as Spring generally heads the list. 26.35 per cent. of the mortality was between 20 and 30. The sea-board counties are considered more fatal than the inland counties, as 118 to 100.

Typhus.—This disease was quite virulent, numbering 1,694 victims; as usual it was most fatal in the autumnal months, and also between the ages of 20 and 30, the sexes being about equal.

Dysentery.—The mortality from this cause was 5.88 per cent. of the whole. This exceeds the average of the past twenty-four years and eight months by .76 per cent. July, August, September and October, were the fatal months; 53.81 per cent. were under five years of age.

Pneumonia.—Seven hundred and sixty-six males and 725 females died of this disease; 308 less than the previous year. There was greater prevalence of the disease in the interior than at the sea-shore. The greatest mortality being in the Winter and Spring months; 554 cases occurred under 5 years; 1,535, over 50; and 404 between these extremes. Old age and infantile next follow

in succession. Cholera Infantum numbered 1,154 deaths; 37 more males than females. August was the most fatal month as usual. Heart disease is the next most fatal cause.

Scarlatina.—The whole number was only 807; 368 males and 439 females; an unusual predominance of the latter; 60 per cent. were under 5; 73 per cent. occurred in the first half, and 27 per cent. in the last half of the year.

Diphtheria.—This much dreaded disease caused the death of 672, being about half the average of the two previous years; 50.44 per cent. of the cases were under 5; 77.67 under 10. The greatest mortality was in January; the least in July.

The deaths from erysipelas, croup and teething, were less than in the previous year. There were 202 deaths from puerperal fever and child-birth. The ratio, therefore, of deaths of mothers to children born alive, was 66 to 10,000.

This subject might be pursued almost indefinitely, and other causes enumerated, together with the occupation of those deceased; but I fear that I have already wearied your patient editorial ears, while you have listened to the recital of some of the more important "facts," gleamed here and there, from the elaborate report before me.

B.

Abstracts and Selections.

The Influence of Stricture of the Pulmonary Artery on the Formation of Tubercle.

M. LEBERT, the eminent Professor of Breslow, in a paper sent to the Academy of Medicine of Paris, comes to the conclusion that the stricture above named, at the origin of the vessel, has a tendency to produce an extensive and progressive tuberculosis, the characters of which may be clinically and pathologically ascertained.

Can Typhoid Fever be Arrested?—Dr. Strong, of Buffalo, (*Buffalo Medical and Surgical Journal*), answers this question in the affirm-

ative. He thinks he has accomplished the purpose by applying a blister to the iliac region as soon as the diagnosis is established, and repeating it if necessary. The practice is not exclusively original with Dr. Strong. We have employed it repeatedly, and we believe it has been used by several other physicians in California. The only wonder is that, in view of the pathology of the disease, counter-irritation to the iliac region, or some other system of topical treatment, is not universally adopted. Perhaps the authority of Louis, who prohibited blisters altogether in typhoid fever, has determined the general course of medical practice in this respect. In spite of that high authority, we are inclined to concur with Dr. Strong. Further, there is a great variety of topical means besides vesication, which may be resorted to.

ELECTRICITY IN POISONING BY OPIUM.—The *Annales de l' Electricite* calls attention to the value of this agent in opium-poisoning. It narrates four cases where it was successfully employed when the patient was *in extremis*, and when all the usual means, vomiting, stomach-pump, coffee, tannin, etc., (belladonna not mentioned), had been tried, and had failed. One pole was placed at the nape of the neck, and the other in the perineum, and in a quarter of an hour the improvement was such that the patient was out of danger.

Letter from Paris.

PARIS, November 10, 1867.

A CURIOUS scene took place the other day in one of the private anatomical classes that cluster around the Ecole de Medicine, and supplement its august instruction. Every one knows the name of Dr. Auzoux, the famous fabricant of anatomical models, whose mannikins traverse the Atlantic, and find their way into every medical school in the United States. These mannikins are manufactured in a little village near Paris, and eighty workmen and women are employed in the factory. Over this community, Dr. Auzoux watches with fatherly interest, and besides attending to the wants, the morals, and the private life of all his employes, he provides them all with anatomical lessons. This last, of course, is as much in his interest as theirs, since no one would

undertake the precise and difficult work required, without a special training. All the eighty employes become expert anatomists without having ever seen a cadaver or handled a scalpel. M. Auzoux takes great interest in promoting marriages among the *ouvriers* and *ouvrieres* who settle in the village, and, in course of time, send children to work in the factory of their beloved master. The consequence is that all the village knows anatomy, just as in Montaigne's time, all the village in which he lived learned how to speak Latin, because his father trained the servants of his household to talk in Latin to his son. It is said that the very cows are acquainted with the structure of their own bodies.

To prove the proficiency acquired by these peasant anatomists, Dr. Auzoux brought three of his work people, one man and two young women, to Dr. Fort's anatomical class, and examined them before an amphitheater crowded with students. The examination was long and minute, and conducted not only by Dr. Auzoux, but by Dr. Fort himself. The answers were invariably correct, and showed a minute and intelligent knowledge of anatomy, superior to that of many medical students presenting themselves for the *doctorat*. Dr. Auzoux, with just pride, pointed out the result as a striking proof of the utility of his preparations as a means of assistance in committing to memory the vast collection of anatomical details required in a medical education.

Editor's Table.

THE OHIO STATE MEDICAL SOCIETY.—Nothing so completely represents the vitality of the profession in any locality as the state of its organizations; its local and state societies. Still we are sorry to note that many physicians seem to think they have completed the full measure of their duty, when they have accomplished creditably the daily tasks that come up to them in their routine, or at most if they have sharply criticised the shortcomings and delinquencies of their neighbors.

In the last issue of the *Western Journal of Medicine*, "one of the ablest writers of our country" takes the last meagre volume

of transactions of the Ohio State Medical Society, as a text for scolding the profession of Ohio, in a manner which is certainly well deserved enough in some respects, though we are doubtful of the good taste of the performance in some other respects.

A few things, however, are very certain, and we trust the profession will take the strictures of "Ohio" in good part to that extent; it is certainly true that some of the best men in the State do not take an active part in the meetings of the State Society; that gentlemen are often placed upon committees who are never guilty of a report; that the "transactions" are by no means what they should be. But whether the intimations of "Ohio" are correct as to the causes, we shall not attempt to say. We fancy though that they will scarcely be regarded as reasonable by those who know something of the state of things here at home; at any rate as the next meeting of the State Society will be held at a delightful season of the year, and at Delaware, one of the most delightful villages of the State, central and easy of access, we hope the profession of the entire State will rally and see to it that the temple is scourged of those money changers who have been "running" the Society so long for their own special glorification.

We can not, however, permit the opportunity to pass without saying, that we certainly do not assent to the idea that the bulk of the printed volume of transactions should alone be the evidence of the usefulness, or extent of the labors of the Society. It is not alone in voluminous essays that such a body exerts its influence, or seeks the accomplishment of beneficent plans. Institutions for the education of the blind and deaf, and feeble minded, asylums for the insane, which are so successfully conducted in Ohio, are monuments alike to our State glory, and the quiet unobtrusive influence of the Society. There are besides these many similar objects of State professional interest, for which we may farther work as an association, all of which make on its annual record but a few brief paragraphs to swell its transactions. Then there is the proper legislative and social interests of the association to characterize its proceedings. But in all its features of varied usefulness, we trust the profession will now see to it that they are fixed, developed and cared for. Let us all remember then the meeting at Delaware, on the *first Tuesday in June*, and let the long list of committee men whose duty it will then be to report, tremble in advance, if they are

of those who seek to record their names in places of honor, but shrink from the implied labors and duties that are thus accepted.

NEW Books.—Just now there seems to be an unusual activity in the publication of medical books; and we are pleased particularly to note that an unusually large proportion of those which reach our table are valuable and practical. Many of these have already been more fully noticed in our regular bibliographical department, but some of these enterprises are worthy of continued notice as matters of editorial interest. Thus the commencement of a series of *Hospital reports* as a new feature in American medical literature is worthy of special interest and regard. The old *Pennsylvania* starts off with a volume issued by Lindsay & Blakiston, to be followed about these days by the Bellevue Hospital of New York. In another part of this journal we notice more particularly the commendable enterprise of Butler & Brinton in the publication of a *compendium* of medicine, after the plan of Ranking & Braithwaite. Incidentally, though scarce by authority, we also notice the promise of a new edition of Renouard's History of Medicine, translated by Prof. Comeygs, of this city; we trust this is correct. A new edition of our worthy American author, the venerable Prof. George B. Wood's work on *Materia Medica* is announced. And in all the departments of the profession, we note works either reprints, translations, or works of American origin, already issued or very soon to make their appearance.

THE GALVESTON MEDICAL JOURNAL—Edited by Greensville Dowell, M. D., comes to us just closing up its second year of existence and worthy labor; we trust the profession of the great South-west will foster this labor of love, and enable its proprietors to develop it into a full sized and full paying journal.

A NEW JOURNAL.—*Cincinnati Medical Repertory*.—This is the title of a new candidate for favor, edited by our friend and neighbor Prof. J. A. Thacker. It is intended as the organ of the Cincinnati College of Medicine and Surgery, which is, perhaps, the worst feature in its face, as organs are long since voted to be most unmusical of wind instruments. It affords thirty-two pages monthly for one dollar a year, which about pays for paper and press-work.

THE AMERICAN JOURNAL OF OBSTETRICS.—On or about the first of May, the publishing house of Simpson & Co., of New York, will issue the first number of a quarterly devoted to Obstetrics and the Diseases of Women and Children, and edited by Emil Noegerath, M. D., and B. F. Dawson, M. D., at three dollars a year. This is another of the progressive movements of the American medical profession, so fast taking in all respects the advance in whatever pertains to the progress and interest of our profession.

POCKETING THE PEDICLE is the title of a paper by Prof. H. R. Storer, in the last number of the *American Journal of Medical Sciences*. It is specially devoted to the consideration of the best means for treating the ovarian stump after excision. In the report of the case included in this paper, two points are made if we rightly understand Prof. Storer; first, the operation in this case was during the period of menstruation—a condition not hitherto deemed favorable for pelvic operations; second, pocketing the pedicle—that is the operator embraces the raw surface in the attachments of the abdominal walls, thus securing, as he thinks, the most favorable conditions for a primary union of the surfaces. The result of the case was a successful one, and, to that extent entirely corroborates the views of Dr. Storer in his interesting paper.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.—The Fifteenth Annual Meeting of this body was held in New York City, September 10, 1867, and we have before us the large and interesting volume of its transactions. The American Pharmaceutical Association is one of the best *working* societies of which we have knowledge, and its example may be safely and profitably emulated by other bodies of professional laborers who have hitherto seemed to think that in a multitude of words there was great wisdom. We have not time at present to review the matter of its interesting table of contents.

THE TREATMENT OF DISEASES OF THE THROAT AND LUNGS BY INHALATION.—We are under obligations to Mr. Max Wocher,

of this city, for a copy of a little book on the whole subject of inhalations. It is a translation by our townsman, Dr. Samuel Nickles, of Emil Siegel's German book on this subject. Most of our readers are aware that the invention peculiar to Siegel is the special contrivance for the ready pulverizing or atomizing of medicinal fluids; so that for their introduction into the lungs it is not so necessary to convert the medicinal substance into a vapor, but merely to *pulverize* it into a spray, whereby its inhalation is rendered ready and complete. Mr. Wocher, being engaged in the manufacture of the Siegel apparatus, was frequently inquired of for a convenient work of reference on the modes, indications and remedies, of the practice by inhalation, and has had the enterprise to secure the translation and publishing of the volume we have received. It is on sale at Mr. Wocher's and at the publishing house of R. W. Carroll & Co.

PUFFING OF DOCTORS BY THE NEWSPAPERS.—By reference to the report of the proceedings of the *Atchinson County Medical Society*, it will be seen that body has passed a resolution denying the right of the editors of newspapers to use the names of physicians, in their report of accidents and cases in general, without the consent of the physician previously obtained. We heartily indorse this action, though we have no doubt when the reportorial fraternity come to hear of it, they will find in it new evidence of the proscriptive and illiberal spirit of the medical profession. The barbarians of the outside world are utterly oblivious of that fine feeling of ethical justice, which is possessed by every true gentleman of our profession. Hence, they are not slow to censure a physician, who politely declines to become a party to the bad treatment of another of his cloth. They can not understand why they are not at liberty to bring in a new attendant in a case of sickness, without notification of the desire to change to the old one; although the latter may have far more ability to conduct the case than the former, and be doing all that human knowledge could suggest at the very time.

So when a man gets knocked down in the street, and Dr. A. is called to render his assistance, the reporters think it strange they should not be indulged in the privilege of a sensational article, in which the name of Dr. A. shall figure prominently, as being the means, not through Providence, but his own extraor-

dinary abilities of having rescued his fellow-citizen from an untimely death. They do not consider for a moment that they know no more of the merits of the case than they do of the nosology of diseases in general; that even if Dr. A. has pursued the intelligent course, which a thorough knowledge of his profession points out, he has done no more perhaps than dozens of others *within the same community* could do, and that by thus singling him out as an object of eulogium, a downright injustice is done to his peers, his betters, and even to the people themselves, in thus investing him with an exclusive skill which he does not, in ninety-nine cases out of one hundred, possess. No true physician desires this kind of notoriety. If he be really learned in his profession, and be possessed of more than ordinary ability, he knows where to display it, that he may reap a fame above the suspicion of having purchased it—that is through the organs of his profession.

But to do the reporters justice in these particular cases, we must admit that we have seldom seen these unfair puffs concerning physicians, except the doctor has himself had a hand in it. It is true that in recording a casualty in the daily papers, it is generally stated as a fact pertinent to its relations, that Dr. A. or B. dressed the man's wound, or extracted the ball; but so long as the mere fact is stated as an item of news, and no effort is made to pay a glowing tribute to the doctor's skill, we do not know that we could find much fault with it, or stop the practice if we did. It might result as did the case of an over-sensitive friend of ours, who, observing his name mentioned in a paper, as being in attendance upon a man who had recently been hurt, excitedly called upon the editor to forbid his using his name publicly again. The editor mistaking the nature of his offending, and anxious to rectify his error, stated the next morning that our friend Dr. _____ was not attending the case at all. This brought the doctor once more to the editors sanctum, and he was informed that the apology was worse than the offense, inasmuch as it contained a falsehood. The obliging editor said in his next paper, that he was mistaken in stating in his previous issue that Dr. _____ was not in attendance upon the man recently hurt; that the doctor after first denying it, had now acknowledged that he was in attendance, and from the fact that the man's death had just been announced, he, the editor, was inclined to believe the doctor's last assertion to be the true one.

From our own observation, the irrelevant portion of newspaper articles referring to physicians, as we have before said, is most usually—not always of course—prompted by the doctor or his agents. That this is true will appear from the character of the article itself. This, apart from the mention of a physician in attendance upon an emergency, generally consists of a notice of a particular operation performed by the talented Dr. Marvellous; and it is really amusing to observe how small an achievement is sometimes made the basis for a huge display of fanfarnade. We remember well a local notice which appeared a few years since, in one of our city papers, stating that Dr. —— had, upon the day before, performed a most difficult surgical operation, that of *extracting a needle* from beneath the skin of a woman's chest; and adding that the result was no less gratifying to the numerous friends of the doctor, than it was to the friends of the woman *whose life had been so skillfully saved*. The gentleman of whom this was said, claimed to be a respectable physician.

Editors are like all other people in the world (*except physicians,*) in this, that whatever they do beyond the requirements of an exact justice to their fellow-men, and an ennobling *amor patriæ*, they do for a consideration; in other words, they are much too shrewd to blow anybody's horn, unless they are furnished the wherewith to *raise the wind*.—*Leavenworth Medical Herald.*

Miami Medical College—Course of Instruction for Summer of 1868.

The usual Course of Instruction will be given in this School, commencing about the middle of March and continuing until about the first of July. All the Faculty will contribute to the Course of Instruction on the following plan :

Prof. Mendenhall, Obstetrics.

Prof. Murphy, Diagnosis and Clinical Medicine.

Prof. Mussey, Fractures and Dislocations and Surg. Appliances.

Prof. Clendenin, Surgery.

Prof. Foote, Clinical Surgery.

Prof. Chapman, Chemistry.

Prof. Richardson, Diseases of Women.

Prof. Stevens, Materia Medica.

Prof. Taylor, Principles of Pathology.

Prof. Williams, Eye Surgery and Clinical Ophthalmology.

Special lectures will also be given as follows:

Dr. A. D. Williams.....	Diseases of the Ear.
Dr. G. A. Bruhl.....	Laryngoscopy.
Dr. C. D. Palmer	Obstetrics.
Dr. S. P. Bonner.....	Surgery.
Dr. W. H. McReynolds.....	Physiology.
Dr. C. P. Judkins.....	Anatomy.
Dr. W. K. Perrine.....	Chemistry.
Dr. J. L. Cilley.....	Practice of Medicine.

It will thus be seen that the student will have unusual advantages in general and special departments of study, fitting him for the most profitable enjoyment of a subsequent winter course. This course is supplemental to the regular course, and is not considered an equivalent for a course for graduation. The hours occupied at College will be so arranged as to give the student ample time for reading, *Practical Anatomy* and *Hospital Attendance*. The *College Dispensary* also affords a large amount of clinical material and opportunities for the study of *Auscultation*, etc. Term \$20. Address any of the Faculty, or

E. B. STEVENS, M. D., *Secretary.*

Sensational Obstetrics.

We notice a paragraph of wonderful sexual transformation, first appearing in the *La Crosse Democrat*, but going the rounds of the medical press. We offer the following "strange case" as an offset, taken from one of our city exchanges:

The following, taken from the *New York Post*, reminds us of a somewhat similar occurrence near this city recently, as reported:

"A story is told of a lady very hastily buried alive at Passy, last month. She was seized with a lethargy which terminated in apparent death. She was laid out in a coffin, and a hearse was at the door waiting to convey her to the cemetery, when her husband said he was not satisfied that she was really dead. In consequence of his determined opposition to the interment, three medical men were called in. They found that her heart was beating, and in their presence a child was born, but dead. The coffin and hearse were sent away. The lady, however, never recovered consciousness."

The local incident referred to is stated as having occurred in

the following manner: The body of a lady of this city who had died while *enceinte*, and within a short time of the day looked forward to for her confinement, was taken to the Catholic Cemetery, near Lick Run, for burial. Owing to the frozen condition of the ground it was found better to deposit the coffin and its contents in a vault for a short time, until a suitable grave could be dug. On the day following another body was deposited within the vault. When those in charge of the place were about to leave and lock the vault, after their duties with this body were performed, they noticed certain indications about the other coffin (of which we are not informed) that justified them in opening it. They did open it, and when they had done so, they were astonished beyond measure to find that it contained three dead bodies instead of one. Parturition had taken place, and the corpse of the woman (if a corpse she was when buried), had yielded up the dead bodies of twins.

We are unable to make a positive assertion of the accuracy of this statement, or to give any names in connection with it. For some reason, all statements of the affair have been suppressed on the part of those acquainted with it, if, indeed, it ever transpired. It may be possible that, through some terrible mistake, the woman was buried before her death.

Reviews and Notices of Books.

Lectures on the Diseases of Women. By CHARLES WEST, M. D., Fellow of the Royal College of Physicians, etc. Third American, from the Third and Revised English Edition. Philadelphia: Henry C. Lea, 1867.

The author of the work before us, is certainly one of the clearest and most satisfactory writers on diseases of women and children in our language. His book on Diseases of Women is a systematic treatise on the whole subject, while, at the same time, it embodies the author's extended experience and matured observations. We think, therefore, we do but repeat the accepted sentiment of the profession, and especially those teachers who have in any degree made this department a specialty, in most heartily commanding

this book to our readers. As compared with previous editions, the present embraces chapters on Ovarian Disease and Uterine Hæmatocoele. The plan and the mechanical execution will meet the approbation of the reader. For sale by Robert Clarke & Co. Price, \$3 75.

Diseases of the Heart. Their Diagnosis and Treatment. By DAVID WOOSTER, M. D., Member of the Royal Academy of Medicine and Surgery of Turin; author of "Diphtheria and Congenital Asphyxia;" former editor of the *Pacific Medical and Surgical Journal.* San Francisco: H. H. Bancroft & Co., 1867.

This little manual on Diseases of the Heart comes to us from the Pacific Coast, and we have examined it with a great deal of pleasure and satisfaction. The subject matter is not particularly new, but Dr. Wooster has arranged his views in a condensed and convenient manner, presenting the anatomy, physiology and diseases of the heart and its structure in a clear and systematic order. In his preface our author states his opinion that cases of heart disease are of alarming frequency in California, and his private practice has afforded him an extended field of observation. We think our readers will be repaid for buying this little book, which we learn is for sale by Bancroft & Co., 113 William Street, New York, but we do not know the price.

On Diseases of the Lungs and Air Passages. Their Pathology, Physical Diagnosis, Symptoms and Treatment. By HENRY WILLIAM FULLER, M. D., Cantab., Fellow of the Royal College of Physicians, London. From the Second and Revised Edition. Philadelphia: Henry C. Lea, 1867.

This excellent treatise embraces chapters on the following points: Principles of Diagnosis, Inspection, Manual Examination, Percussion, Auscultation, etc., with their application as diagnostic resources. Respiratory Sounds, Adventitious Sounds, etc.

Part Second is devoted to the pathology, diagnosis and treatment of the more important diseases, as Pleurisy, Pneumonia, Acute and Chronic Bronchitis, Asthma, Whooping-Cough, Pulmonary Consumption, etc.

Dr. Fuller has condensed the important and difficult subject of Diseases of the Chest into convenient shape, and has made a book which will prove a safe and convenient guide to the student and young practitioner. On a very few points Dr. Fuller has ventured to differ from some of the hitherto accepted doctrines, but

when he has done so he has frankly and fully explained the reasons for his belief. For sale by Robert Clarke & Co. Price, \$3 50.

A Practical Treatise on Shock, after surgical operations and injuries, with especial reference to shock caused by railway accidents. By EDWIN MORRIS, M. D., F. R. C. S. (Exam.) etc. Philadelphia: J. B. Lippincott & Co., 1868.

The title, as given above, very well expresses the general idea of our author in his little monograph. But we notice that more particularly he endeavors to give an elucidation of the professional or scientific understanding of the word *shock* itself, a word frequently used in medical writings, but not anywhere very clearly explained. Incident and anecdote cleverly illustrate the author's views, and make this little book both instructive and readable. For sale by Robert Clarke & Co. Price, \$1.

Hufeland's Art of Prolonging Life. Edited by ERASmus WILSON, F. R. S., author of "A System of Human Anatomy," etc. From the last London Edition. Philadelphia: Lindsay & Blakiston, 1867.

The original of this neat little volume was written nearly a hundred years ago, it is full of interest and instructive to the maturest mind. The topics which are considered are so various as to forbid anything like a review of them within the limits of this brief book notice, but as we all *desire* to live long, notwithstanding our gross violations of those laws which preside over our being, we doubt not there will be a disposition to study this classical volume.

Much of the introductory matter is concerned about topics of a historical and mere literary association with the subject; but the inquiries into the nature of vital power, the causes of the duration of life, the possibility of prolonging life, are all of special interest in the study of this subject. So, too, our author's chapters upon the incredible age of the patriarchs, together with the great age often attained by hermits, monks, and in various special instances, naturally suggest a variety of practical deductions. After these inquiries are disposed of, we have the consideration of the two important and directly practical questions: *First*, those means which shorten life, and, *second*, those means which prolong life. We think we have reached very advanced states of scientific attainment, but it is interesting to note in both of these points of inquiry how truly and life-like Hufeland, so long ago,

painted the errors and vices that to-day break down into premature old age the men and women of the present time; and we respectfully suggest that a reprint, in pamphlet form or prize essay form, of the *five chapters* in this volume, from page 205 to 232, is far ahead in perspicuity and pith of any of our popular essays on the marriage relations; and the elements of a virtuous and healthy population are well and briefly stated—chastely, but to the point. But we can not at present dip more fully into this little volume. We think our readers will be pleased and profited by its study. Price, \$1 25.

Studies in Pathology and Therapeutics. By SAMUEL HENRY DICKSON, M. D., LL. D., Professor of Practice of Physic, in Jefferson Medical College, etc. New York: William Wood & Co., Publishers, 1867.

The essays in this little volume have the following titles: Disease, its character and tendency; The Causation of Disease; Of Certain Morbid Conditions of the Sensorial System; Pneumonia; Scrofulosis and Tuberculosis; Therapeutics. Four of the essays the author tells us were delivered before the class of the Jefferson Medical College, during the Course of 1866. The Essay on Scrofulosis and Tuberculosis was delivered during the Course of 1867, and the Essay on Pneumonia new appears for the first time. Prof. Dickson is well known as a graceful writer and vigorous thinker, and his many admirers will gladly receive this little volume as a contribution to the literature of our profession. For sale by Blanchard & Co. Price, \$1 50.

Business Notices and Acknowledgments.

NEW Books.

Wooster—Diseases of the Heart. H. H. Bancroft & Co.

Dickson—Studies in Pathology. William Wood & Co.

Condie—On Children. Henry C. Lea.

Tanner—Signs and Diseases of Pregnancy. Henry C. Lea.

Tobold—Chronic Diseases of the Larynx. William Wood & Co.

Stellwag—On the Eye. William Wood & Co.

Nickles—Siegel on Inhalations, etc. R. W. Carroll & Co.

PROPERTY AND LOCATION FOR SALE.—In Camden, Preble County, Ohio, consisting of a nice frame house, stable, wood and wash houses; plenty of shrubbery; all new; half-acre lot. Good pikes in all directions; two trains from Richmond to Cincinnati daily. All for twenty-five hundred dollars. None but a first-class man will suit.

S. HART, M. D.

LITERARY EXCHANGES.—The various prominent exchanges of our country are on our table, and the publishers will please accept our thanks. We have so frequently noticed these in *extenso* that for the present we only call attention of our readers to them by title.

Oliver Optic's weekly magazine for Our Boys and Girls, is one of the neatest of our exchanges, and coming, as it does, every Saturday, is a constant treat to the little folks. Price \$2 50 per annum.

Ticknor & Field continue to issue the *Atlantic*, *Our Young Folks* and *Every Saturday*, and people eagerly look for the latest issue of these favorite publications, which are on sale at every news stand.

Harper's Monthly Magazine appears to be one of the accepted institutions of the country. Price, \$4 a year.

Godey's Lady's Book "improves with age, and will keep in any climate." Price, \$3 a year.

DIAMOND DICKENS.—We have received the tenth volume of this series of Dickens from Ticknor & Field, the publishers. It comprises, under the same covers, *Barnaby Rudge* and *Hard Times*, with the usual full compliment of illustrations. The cost is only \$1 50 a volume for the illustrated edition, and \$1 25 for the plain.

FOR THE BEST LIQUORS for medicinal purposes, we can particularly advise our friends to go to Brachmann & Co., 79 and 81 West Third Street, as very reliable.

PALMER'S ARTIFICIAL LEG.—We desire to sell an order for one of Palmer's Artificial Legs, and shall be pleased to communicate with any of our friends upon the subject.

CROWTHER & Co., Fifth and Main, keep a select stock of Drugs and all articles in their line of trade.

W. J. M. GORDON & BRO. have changed their business relations. W. J. M. G. retains the Laboratory and continues the manufacture of Chemicals; O. F. G. continues the business at the old corner of Eighth Street and Central Avenue.

To CLUBS.—See January number for commutation rates, and forward your orders at earliest date.

Obituary.

MIAMI MEDICAL COLLEGE,
CINCINNATI, O., January 8, 1868. }

At a meeting of the class held this day, W. D. Wheeler presiding and S. R. Vorhees Secretary, a committee was appointed to take action in regard to the death of our late fellow-student, A. A. BASSETT. The following resolutions were presented and adopted:

WHEREAS, It has pleased God in His inscrutable wisdom, to call from among us our esteemed friend and fellow-student, therefore be it

Resolved, That in the sudden death of A. A. Bassett this class has been called upon to part with one who, by attention and application combined with a perseverance worthy of all commendation, won for him our esteem and regard.

Resolved, That to the family who have been so suddenly bereaved, this class desires to express its deepest sympathy in their affliction; and, that while they mourn the sudden departure of an affectionate son and brother, we, too, mourn the loss of a kind and amiable associate.

Resolved, That in the untimely death of our class-mate we have been brought face to face with that great and undeniable fact—"the uncertainty of life"—an event bringing forcibly to our minds the words of our Saviour: "Therefore be ye also ready, for in such an hour as ye think not the Son of man cometh;" which injunction demands our most serious consideration.

Resolved, That a copy of these resolutions be presented to the family of the deceased; also published in the paper of the county in which he formerly resided, and the *Lancet and Observer*, of Cincinnati, Ohio.

A. W. DAVIS,
W. M. KERR,
J. N. REGAN, } Committee.

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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No. 3.

Original Communications.

ART. I.—*Hypertrophy of the Cervix Uteri Cured by Excision.*

[Published by vote of the Academy of Medicine.]

BY DR. JAMES BIGELOW, Indianapolis, Indiana.

THE subject of this operation being the one upon whom I performed the plastic operation on the vagina for prolapsus uteri, reported in this journal for October, 1866, I will only state the outlines of the history of the case prior to that operation.

A robust, medium-sized lady, aged forty-two, married and sterile, the subject of dysmenorrhea for sixteen or seventeen years, suffering excruciating pain especially for four or five days immediately *following* the cessation of her menstrual flux, gradually became the subject of prolapsus of the womb, with elongation of the neck of that organ. After more than six months ineffectual effort to cure or relieve her medicinally, the operation of denuding the vaginal walls and procuring their adhesion was performed (as described in that report), which succeeded in retaining the uterus *in situ*. It was hoped by that operation, in addition to curing the prolapsus, to facilitate the cure of the hypertrophy of cervix.

That operation was made in July, 1866. After she had recovered from the operation, I used iodine, mercury, etc., internally, and made deep eschars with pot. cum. calee locally, and, for a period of three months, kept the cervix completely enveloped in iodized cotton lint without benefit, the os still remained very

small and menstruation painful. Frequent passive hemorrhages had supervened from the uterine and nasal cavities. Efforts were made to determine if there was any uterine polypus, but without success, owing to the unyielding condition of the os. At this time the cervix was increased very much in length and thickness, the os occupying a position in the plane of the vulva, and encroaching on the meatus urinarius, so as to render micturition difficult and painful. In consultation with Drs. Todd and Comingor, of this city, it was decided that amputation would afford the patient great relief, if not a permanent cure. Accordingly, on the 18th of June, 1867, assisted by those gentlemen, chloroform was administered (which failed to produce more than momentary anesthesia, which somewhat retarded the operation), the patient placed in the lithotomy position, the uterus drawn down with a tenaculum, the chain of an ecraseur placed around the organ one inch below its body and tightened so as to strangulate the vessels, and by a few rapid turns of the lever of the instrument, the neck was excised, separating two and a half inches of the hypertrophied cervix. After a few minutes' delay, finding there was no hemorrhage, a piece of lint saturated with Ferri persulph. was applied to the stump for greater security, and the parts replaced in their normal position. The hemorrhage from the operation to convalescence did not amount to two ounces. The pain either at or after the operation was inconsiderable. The bowels were kept quiet and disinfectant washes used per vagina for a few days, and in two weeks she was allowed to sit in her easy chair. In two months the cicatrization was complete, leaving a neck and os of normal dimensions, except that the latter is slightly contracted. Menstruation is now easy and regular, and her general health much improved.

Upon making a section of the excised cervix, a polypoid growth four lines in thickness was found attached by a broad base about one line below the point of excision, and reaching down the canal to within one inch of the os tincæ. This was, no doubt, the cause of the passive hemorrhage, and may have been, to some extent, the cause of the increasing hypertrophy of the neck. There was no perceptible disease of the body of the uterus at any time.

In looking over the literature of this operation, I do not find any statistics of much practical value. In the United States it has been performed up to the year 1855, as follows: By Drs. Jameson, of Baltimore, in 1824; Strahn, of Virginia, in 1829;

Warren, sr., of Boston, in the same year; Moore, of New Hampshire, in 1847; Atlee, of Philadelphia, in 1848; Eve, of Georgia, in 1850; Parsons, of Rhode Island, in 1852, and Ogier, of Charleston, in 1852; but I have not been able to find the published results of these operations. In Lisfranc's method the danger of hemorrhage was so great as to make the operation formidable, and therefore not much practiced in this country.

With a properly-constructed ecraseur, supplied with a thick, heavy chain, in the use of which a short time is given after it is tightened on the part before it is excised, the danger of hemorrhage from the excision of such vascular parts is escaped, and operations of that character rendered simple and safe.

37 VIRGINIA AVENUE, February 11, 1868.

ART. II.—*Aqua Nicotianæ.*

BY J. S. UNZIKER, M. D., Cincinnati.

TAKE of fresh green tobacco leaves eight pounds, cut them and add alcohol one and a half pounds; water sufficient; mix and distil eight pounds.

Care must be taken that the leaves do not become heated by being tied up in bundles, as this would impair the preparation and impart to it the odor of tobacco. The leaves should be taken just before the plant begins to bloom, and should then be worked up as soon as possible; for when the leaves once become spotted, the preparation assumes more or less the poisonous effects of dried tobacco, which is not the case if freshly prepared.

This remedy was first introduced in Germany by Dr. J. G. Rademacher, and if prepared, as above stated, can be given with perfect safety to the smallest child, without any of the injurious effects produced by dried tobacco. From this I judge that nicotine is not developed and communicated to the distillation as long as the leaves are fresh. For the last eighteen years I have used the aqua nicotianæ with the best results in the first stages of pneumonia and fevers generally. It reduces the pulse promptly, the same time acting as a strong diaphoretic, making it especially adaptable to all fevers originating from colds. But where the

tongue is dry, or becomes so after taking it—which is rarely the case—it must be omitted. Its action on the spine and cerebellum is also remarkable. In fevers of children, where diarrhea is present, and the brain more or less implicated, and opiates inadmissible, it gives prompt relieve by reducing the fever, promoting the action of the skin, and gradually checking the diarrhea and removing all cerebral symptoms. The dose for adults is from 3ss—3j every hour or two, and may, with advantage, be given in the form of a mixture in combination with nitrate of soda, acetate of potassa or bi-carbonate of soda.

ART. III.—*Difficult Labor.*

EDITOR LANCET AND OBSERVER:—I herewith send you a report of a case of difficult labor that recently occurred in my practice, and is for many reasons to me an interesting one. Thinking it might interest some of your many readers, I have thought it best to send it to you, and if you think it of sufficient importance you may give it a place in your valuable journal.

On the morning of the 17th of January, 1868, I was summoned to attend Mrs. B., who, I was told, was at that time in labor. I repaired at once to her home as was my duty; upon arriving and making an examination, I found her in actual or real labor, she having had pain for some two or three hours, the os being pretty well dilated; but the pains were not severe, and labor did not progress very satisfactorily. When I first made the examination, I ascertained that it was a false presentation, the head not presenting, and at this time I could not tell exactly the state of the case, but after the rupture of the membranes had taken place, I found that a hand and a foot presented, and immediately upon a pain coming on, the cord prolapsed; thus I had a hand, foot and cord presentation, making a very ugly case, as I thought. I saw at once that something must be done and that quickly, and determined to make it if possible a footling case.

I commenced by trying to elevate the arm and shoulder, and at this time made the discovery that there was no pulsation in the cord. I, therefore, made haste to deliver by making firm

traction on the presenting foot, and at the same time pushing up the arm and shoulder, and after some fifteen minutes I had the pleasure of feeling that I had accomplished my object. Knowing the importance of speedy delivery, I made, with every pain, firm traction on the feet and body, until I had delivered the entire body; but with the head I was not so fortunate, as it seemed to be tightly locked in the pelvis. As soon as I could get my hands up to the head, I introduced the two first fingers of my left hand into the child's mouth, making traction upon the superior maxilla, and at the same time bearing the chin down upon the sternum, holding the child the while upon my right arm. There being still no pulsation in the cord, I looked upon the case as one in which the child would be dead born, and so told the parents.

I continued to make steady traction with my fingers in the mouth, but did not succeed in perfecting the delivery for fifteen minutes longer, being a full half hour after I ascertained that there was no pulsation in the cord. When the child was born it was to all appearance dead. I made use of all the various methods practiced to bring it to life, without effect, and finally told the friends that it was dead; but the parents begged me to persevere longer, and to satisfy them I did so, but without any hope of bringing it to life. I resorted to breathing into its lungs, and artificial respiration, warm and cold effusion, friction on the spinal column, and tapping lightly on the buttocks with the palm of the hand, keeping up this process for at least twenty minutes longer when one of the female attendants remarked that she saw the heart beating, which I found to be the case, but still no breathing or effort to breathe could be detected; but I kept up the manipulations with the more hope of ultimate success, and after, perhaps, ten minutes had elapsed I had the pleasure of seeing the little fellow make an attempt to breathe. I still continued my efforts, and little by little the respirations increased, until after some time longer full respiration was established. The child was too feeble to cry out, as new born babes do, but after waiting some length of time longer I removed it from the mother, and it did well.

This case, in my opinion, was one of apparent death by syncope and not by apoplexy, and required very different treatment than if it had been apoplexy, this being the reason I did not cut the cord and remove the child as soon as it was born. I believe this to be an important case in many respects, some of which are

the following: The length of time that had elapsed after pulsation had ceased until the child was delivered, and in my being able to bring it to life so long a time after birth. It also teaches the importance of long-continued efforts to establish respiration in all cases of false presentation, where there is no pulsation in the cord nor signs of life when the child is born.

J. LUDLOW, M. D.

ART. IV.—*Liquid Oxysulphate of Iron.*

EDITOR LANCET AND OBSERVER:—In 1863, an old physician of Tennessee, in return for some civilities, handed me the following *recipe* for what he termed the “Liquid Oxysulphate of Iron,” which he highly lauded, and said that it had been a great favorite with the few physicians who had knowledge of it. Five years’ use of it in my practice fully confirms the favorable estimate of its qualities, which it gives me pleasure to communicate and make public.

R.—*Ferri Sulph.* ʒij.
Acid Nitric f. ʒiij.
Aqua Distill f. ʒjss.

Rub the sulphate with the acid slowly in a mortar, gradually add the water after the sulphate is all dissolved and filter through paper. Dose, from six to twelve drops in water or quassia infusion.

I have found this preparation to be one of singular efficacy in the majority of cases wherein iron is indicated. It is also an excellent appetizer, and the most palatable of all the forruginous preparations. In the proportion of ʒjss of the liquid to ʒjss of water, its taste precisely resembles that of alum. By substituting simple syrup for the water, the flavor is seldom objected to even by the most fastidious. When thus mixed the dose is a teaspoonful. Besides, it is cheap, easily made, and, with quinine, makes a beautiful clear solution, and a tonic unsurpassed. Those who will use this preparation once will never feel like again resorting to the so-called elixirs of iron.

Yours, truly,
 NEWARK, OHIO, February 3, 1868.

J. R. BLACK, M. D.

ART. V.—*Hydrophobia.*

CASTLETON, INDIANA, February 6, 1868.

DEAR LANCET:—In your journal for January there is a *resume* of a lecture by *Trousseau* on *Hydrophobia*, by G. S. C. In referring to my case of hydrophobia he remarks: “I am inclined to think it was not one of hysteria nor of true hydrophobia, but of the class of cases that *Trousseau* denominates *nervous or mental hydrophobia*.” He selects the following case from *Trousseau’s lectures*, and from which, I suppose, he deduces his opinion—a *Judge* was out riding, and was kissed on the hand by a sporting dog that afterward proved to be rabid: “A short time after this the Judge heard that many of the beasts that had been bitten by this dog had died of rabies. This news alarmed him, because he recalled to mind that on the same day the dog had licked his right hand several times. On examining his hand he found several small scars on it, and seized with terror upon this, he no longer dared to touch water to shave himself, and fully believed he had hydrophobia.” But his dread of water vanished as soon as he became convinced that he should have died long ago.

Now, Mr. Editor, I can’t see how any one, after reading this, and then the report of my case, as published, can come to the conclusion that the cases are similar. The only evidence that my case was not one of true hydrophobia is, the patient recovered.

Miss E— was bitten by a dog, which proved to have been rabid. While many of her friends were anxious as to her condition she *was not*, stating the “wound was too small.” She called at my office four days before she was taken with violent spasms. I saw the wound on her finger, and remarked, “Are you not alarmed about yourself?” “Not in the least; you appear more anxious than I; if I do go mad I will call and bite you,” in a jocular manner.

At this time she was complaining of sore throat and had me prescribe for it. There was redness of tonsils; she also complained of constriction of the muscles of her throat—at times—but attributed it all to cold. This difficulty continued increasing until she could swallow but little of anything. In short, when she called to see me, she was suffering from *all* the premonitory symptoms of hydrophobia, although she was not aware of it. The dread of water in this case never was great except on the two first days

of the most violent spasms. Miss E—— was a young country girl, and was not used to hearing "mad dog stories." Her health was previously good; is now married, and in the sixth month of gestation. Health as good as usual in one in her condition.

G. S. C. makes no allusion to the treatment used in my case. All I will say is, that I think every intelligent physician called to treat a case of this kind, would see the indication for the use of Bromide of Potassium, from priapism up to the spasms of the epiglottis.

I am *inclined* to think, from what I have gathered on this subject, that *not all* the cases of *true* hydrophobia have proved fatal. Many cases of this disease have happened in the country that never found their way into a medical journal.

Respectfully,

J. I. ROOKER.

Special Selection.

A Spring and Self-retaining Speculum.

BY NATHAN BOZEMAN, M. D., NEW YORK.

THE vagina, as a membranous canal in the distended state, may properly be said to represent a truncated cone with the base turned upward and the apex downward, corresponding with its mouth.

The general outline of the organ, as viewed in its natural condition, is such as would result from bringing the two opposing walls of the cone together, the cervix uteri being encircled by it at the center of its base, and its mouth closed by the falling together of the labia majora.

The line, therefore, formed by the anterior and posterior walls of the organ coming together is transverse, while that formed by the opposing surfaces of the labia is antero-posterior, being at right angles.

Now the most natural indications for the dilatation of this canal with the peculiarities named would appear to be, first, separation of the labia, and, second, the two opposing walls of the collapsed cone, so to speak. This, scarcely need I say, is the

view generally taken of the relationship of these parts, and the usual practice is based upon it of bringing within the field of observation the cervix uteri and the two vaginal walls.

This plan of antero-posterior dilatation of the vagina, it matters not what form of speculum is used, I conceive to be a popular error, and it is wholly at variance with the true anatomical relationship of the parts. I shall presently attempt to explain more fully my meaning in our description of *a new form of speculum*, which I have the pleasure of presenting now to the notice of the profession. The principle of construction, as well as principle of action of this new instrument, will be found to differ from all others heretofore in use in several respects, which I shall explain farther on. Suffice it to say, one of the very essential differences is in what might be termed the working point of the instrument, that portion which is applied to the resistance. The blades of our instrument are introduced between the opposing walls of the vagina edgewise, instead of flatwise as formerly; and the dilatation is affected transversely or horizontally, as will be better understood when we come to explain the principle of action. The same instrument applies to the dilatation of the vulva as well as the vaginal canal; thus giving us at one glance a view of the parts from the mons veneris to the cervix uteri in front, and behind, nearly the whole of the posterior wall of the vagina—any and every point within this extensive range being accessible for operative purposes.

The dilatation thus effected is so regulated, that the labia and the two extremities of the vagina are put upon the stretch only to the extent desired, which is in strict accordance with the anatomical conformation of the parts, this being of such a nature as to make the instrument *self-sustaining*, one of its peculiarities; another being *elasticity of flexure*. This principle of elasticity has never before been embodied in any form of speculum that I am aware of, and its utility and importance, in my judgment, can not be too highly estimated. Instead of the hard, inflexible blade formerly used, touching only at one or two points soft and delicate structure, we have now the soft, elastic spring adapting itself to all the points of resistance with a uniformity to be attained in no other way.

The indications for complete dilatation of the vagina and vulva I conceive to be four:

1st. Elevation of the perineum.

2d. Elevation and support of the upper part of the posterior wall of the vagina.

3d. Transverse dilatation of the labia majora and the mouth of the vagina.

4th. Distension and steadiness of the upper part of the anterior wall of the vagina, the vesico-vaginal septum.

Now these are the indications to be fulfilled, according to my judgment, independent of any and all efforts of the patient to the contrary; and any instrument, whether *self-retaining* or *not*, that does not meet these ends, must be regarded as incomplete. With my instrument I claim the accomplishment of all, *the fulfillment of the third and fourth indications* being an advance beyond all other methods, to say nothing of the *self-retaining* quality of the instrument, which it must be admitted is based upon more correct principles than any plan heretofore presented to the notice of the profession.

As regards the position of the patient I propose a few remarks before entering upon the description of our instrument, as I consider this of no little consequence in certain operations, especially those upon the anterior walls of the vagina.

While our speculum is equally well adapted to all positions, I prefer in the description and application of it to consider the patient resting upon her knees and breast, the body forming a right angle with the thighs, and the thighs a right angle with the legs. This position I now prefer to all others, and with propriety it may be termed the *right-angle position upon the knees*.

In no other position, according to my judgment, whether chloroform be used or not, can the patient be made so easy, comfortable and secure, and without the aid of assistance? Our supporting frame, when folded up, is compact, light and portable, and weighs only eleven pounds. It exceeds twelve inches in height, only on one side, the depth and width being twelve by eighteen inches. I hope before long to be able to publish a description of this *thoracic rest or support*.

We have now come to the most difficult part of our task, a description of this speculum.

Fig. 1 (half size) represents a front quarter view of the instrument, expanded as when introduced for use.

The general features of it as shown, are outstretched arms, expanded wings, rolling surfaces, standing and projecting arches,

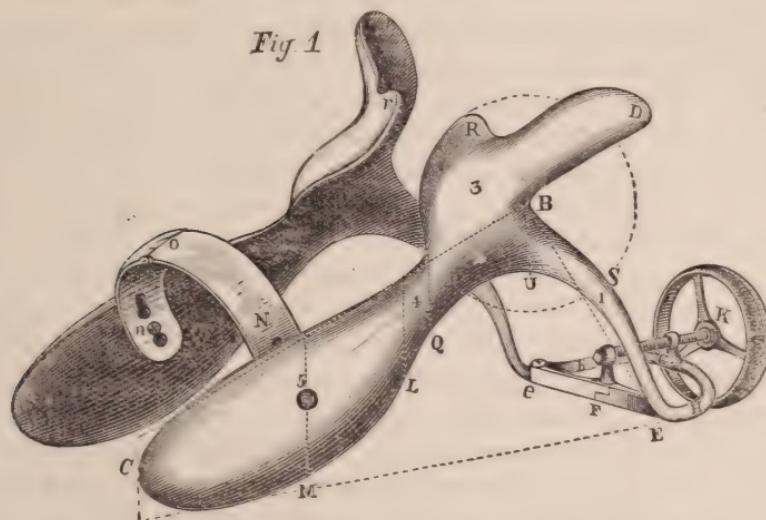
broad, contracted, narrow and rounded points; and the thumb-screw arrangement indicates that the whole is moved by a system of leverage.

The proportions of the instrument are, I think, in harmony, and the construction will be found to be in strict accordance with well-known geometrical principles. It may be said to be composed of two simple, similar bent steel levers, about eight and one-half inches in length, rounded and flattened at certain points, having elasticity of flexure, and connected at one extremity by a pivot joint D, around which they revolve horizontally.

For description, therefore, as is most naturally suggested from its general outline, it may properly be divided into the foot and heel, including thumb-screw and short levers, and into the legs, body, wings, neck and arms, or blades, as indicated by Figs. 1, 2, 3, 4 and 5.

The description of the foot and heel, we will defer until we come to study the principle of action.

Fig. 1



I shall consider B the center of the instrument; the plumb-line U, dropped from it, the balancing-point.

The legs where they leave the heel E and e are rounded, a quarter of an inch in thickness, and for a short distance ascend almost perpendicularly, inclining slightly forward and inward. In the next part of their course they become gradually more and more flattened, extending now almost directly forward, only inclining slightly outward.

The line U indicates their union with the body. Their length is two and three-eighth inches. This part of the instrument applies to the purpose of dilating the vulva or labia majora. The lower part of the legs fall just within the fold formed by the inner part of the thigh and the labia, while the upper portion passes between the latter about the commencement of the nymphæ, and thus reaches the mouth of the vagina, which corresponds exactly with the plumb-line U, the balancing-point.

The body is included between the two lines U and Q, and is somewhat quadrangular in shape, rounding on its outer surface, and hollowed out on the inner side to the same extent as the upper part of the leg and the wing standing upon its upper edge, as indicated by the line B Q. This part of the instrument is applied directly to the transverse dilatation of the mouth of the vagina. The wing is of a peculiar shape, and for the sake of description may be divided into the lower and inner portion and the upper and outer portion. The first part presents a rounded surface from right to left, and up toward the projecting angles R r looks almost directly forward. These projecting arches are about three-quarters of an inch wide, and at the angles are about one inch above a line drawn across from center to center. This part of the wing, with its fellow of the opposite side, gives support to the perineum, which lies across from one to the other, just as the bridge spans the stream. The upper and outer portion of the wing looks forward and outward, and is intended to support the buttock. The neck between the two plumb-lines Q, L, is about half an inch in length and width, and as shown is the most contracted part of the arms. This point comes just within the mouth of the vagina, and consequently prevents painful stretching of the parts here in the expansion of the blades.

The arms or blades form the widest part of the instrument, and are intended to distend and steady the vesico-vaginal septum. They are thin, spoon-shaped, about two and three-eighth inches in length, and at M one and a half inches wide. On the middle of this line is seen the countersunk head of the rivet which passes through here and gives support on the inside to the extremities of the arch N n, connecting the blades at this point. This arch is four and a half inches in length, connected in its middle by a hinge joint O, and about three-quarters of an inch in width. It should be made of steel, and so thin between the joint and extremities as to allow of easy bending in the open-

ing and shutting of the arms. There are two holes near each end, with slits in upper edge to encircle the narrow neck of the rivet when in use. This arch may be used or not, as circumstances may require, it being easily slipped off or on. When used it is intended to elevate and support the upper part of the posterior wall of the vagina, it being the fulfillment of our second indication. It is easily elevated or depressed with the finger, and when in position stands about one inch above the edges of the blades, and on a plane slightly above that of the projecting angles of the wings R r. Nearly the whole of the instrument, as will be seen by reference to the figure, is included within the legs of the right-angled triangle E B C, only the foot, legs and wings, being outside. The circle D R Q S has its center at B, the center of the instrument, with a radius of one inch and a quarter, the length of the line of union between the root of the wing and the body. This circle, as is seen, includes nearly the whole of the wing, the body, and a large part of the leg. This angle and center of circle, I should observe, are important points to be borne in mind in the manufacture of the instrument. They should be preserved in all cases, it matters not what change may be found necessary as regards proportions.

The instrument, when set upon a table, has its foot flat upon the surface, touching nowhere else excepting at the point near the ends of the blades, as indicated by the base line of the angle E C, which measures four and three-quarter inches. The leg E B, measures two and three-quarter inches, and C B, four and a half inches.

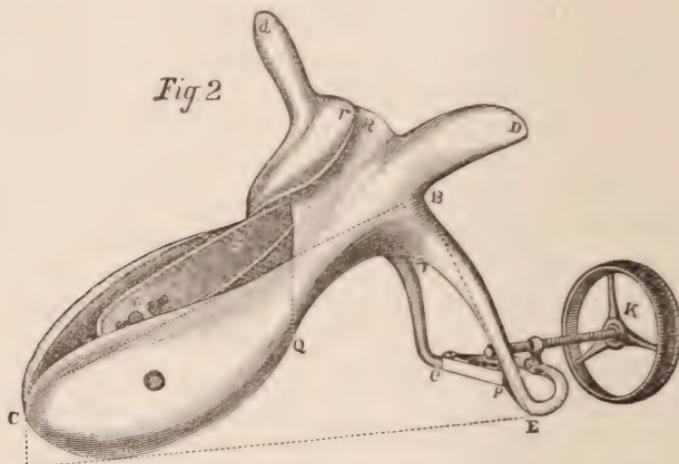
From center B to corresponding point of opposite side, the distance is two and a quarter inches. Between tip of wings D d, four and a quarter inches. Between commencement of neck Q, three inches. Between blades at M, measuring from outside to outside, four inches. Between points measured in the same way, three and a half inches.

The instrument is to be made of steel, electro-plated, as light as is consistent with the strength required, there being certain points, of course, where this is an important feature; for example, the foot and the heel of the instrument.

The *elasticity of flexure*, it should be borne in mind, extends only from the heel to the extremities of the blades, increasing of course, in extent as the latter points are approached. The limit of elasticity at the points of the blades should not exceed three-

quarters of an inch under any amount of resistance here, and this should be borne in mind in *tempering* the instrument, otherwise the limit might be exceeded, and the usefulness of the instrument thereby endangered.

Fig. 2 represents the instrument closed, ready for introduction or withdrawal. It being collapsed, so to speak, every point of the opposing sides is brought into closer relationship. The elevated arch standing above the edges of the arms or blades, as seen in the first view, is now folded within them, the upper part of it resting beneath the hugging arches, R r.



In this view of the instrument, there are three divisions made by the two plumb-lines U and Q, which are important as directing attention to the uses of the respective portions. The leg, for example, included within the first division, performs the part of separating the *labia majora*. The wings and body of the second division, elevate the *perineum*, and open the *mouth of the vagina*, to the utmost limit transversely. The arms or blades of the third division *unfold and steady the vesico-vaginal septum*, or upper part of the anterior wall of the vagina, and at the same time give support to the two extremities of the arch which spans the space between them, and receives upon its top the *falling posterior wall of the vagina*.

The thumb-screw K is seen reversed to its fullest extent, and the two short levers quietly folded within the foot of the instrument, the point P being now in close proximity to the pivot G.

We come now to a consideration of the principle of the in-

strument, and I will state in the outset, as thus applied, it is new and original with myself, it never having been applied before, that I am aware of, by any one, to the purposes of a speculum.

The principle itself, however, is an old one, as regards its application to other purposes. It will be familiar to those who may have seen a certain kind of *cotton press* in the Southern States, in which it is employed, though with a more extensive system of leverage than I have here. I got the idea myself from seeing the above application; and the credit I am entitled to is the modification which I have made of it, to suit the purposes of a *self-retaining speculum*, the principle of which we will now attempt to describe. This principle, as here applied, I have no hesitancy in saying, forms one of the most beautiful illustrations of the parallelogram of forces as producing curvilinear motion that could be conceived, and answers, in the most satisfactory manner, the purpose for which it is here intended.

In studying the law of forces, there are several important points always to be borne in mind, whether applied to the rudest lever or pulley, or to the most complex piece of machinery. As these points are or are not understood, depends success or failure.

Prof. Silliman,* who is authority in matters of this sort, says: "To determine a force with precision, we must consider three things: 1st. The point of application. 2d. The direction. 3d. The intensity or energy with which the force acts."

Inattention to one or more of these rules has, I am satisfied, caused the failure of all previous efforts at getting up a *self-retaining speculum*, to fulfill all the indications previously named. I am free to confess myself that I failed in many of my efforts from this very cause.

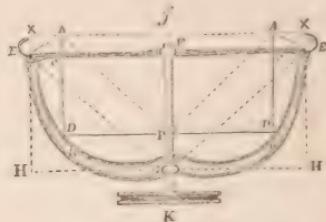
My greatest error I now conceive to have been in the point selected for the application of force. Had I the time and space, it might be interesting to show how I labored to extricate myself from this difficulty: but as it is, I shall be content for the present with saying that this instrument, as here exhibited, is not the work of a day, or a week, or a month, but years of patient thought and repeated disappointments.

Let us now turn our attention to the diagram, Fig. 3, which is also a half-sized front view of what I have denominated the foot

*Principles of Physics.

of the instrument, here represented closed and expanded, with both legs cut off at the heel E and E.

Fig. 3.



The two sides E & G together form, as is seen, almost a semi-circle, with a radius of one and a quarter inches. In the middle, where they unite, is the pivot-joint G, and here is the point of our application of force.

These arms are inflexible, somewhat round, and almost of uniform thickness, not exceeding a quarter of an inch anywhere, excepting at the pivot and ends, where they swell out a little, to give additional strength.

Within these arms is situated our plan of leverage for opening and shutting the instrument. This consists of a double-threaded thumb-screw K, about one and three-quarter inches in length, and three-eighths of an inch in thickness, with an open wheel on the outer end, one and an eighth inch in diameter; and of two short, stout levers, one and a quarter inches long. These latter are connected at one extremity by a joint at the heel E and E, two and a half inches from the pivot G. At the other extremity they are connected together by a joint at P. Rising above, three-eighths of an inch, is to be seen the connecting screw of this joint expanded, and perforated to receive the extremity of the thumb-screw, upon the extremity of which, on the outside, is placed a small tap. In the same manner the thumb-screw passes through the connecting pivot-screw G, which is the nut, the former being free to move both forward and backward.

Let the two lines now on each side, A D and P D, represent the instrument closed, A f and P f completing the rectangle or square. The diagonal P A will then represent the situation and relationship of the two short levers previously described.

To open or expand these arms now to the full extent, we have, as would appear, two forces, A P and A P, acting at an oblique angle, a very great mechanical disadvantage, as will be

readily understood, for "when a force acts upon a body at any other than a right angle, a part of its effect is lost."

The difficulty, however, is overcome and the accomplishment of our purpose rendered easy by resolving each of these oblique forces into two, $P\ f$ and $A\ f$, one parallel and the other perpendicular to the point to be moved. This is effected by revolving the thumb-screw K until it assumes the position of G F, and the short levers that of E F and E F. The latter together now form a straight line—a relationship that places the whole instrument in a state of equilibrium; the weight of the two sides being equal, is exactly counterpoised at F. Complete now the parallelogram E H G, and we have the diagonal G E, the resultant of the two components thus applied, which gives us the diagonal or oblique relationship of the arms of the instrument which is here so beautifully carried out. In this resolution of forces, therefore, our power is seen to pass through the arc of a circle which is the diagonal of the small parallelogram A c, E x, the distance A E being three-eighths of an inch. As it is with the seat of power, so it is with every other part of the instrument to the extremity of its blades, which, with varying radii, passes through the arc of a circle the length of which, as well as the velocity of which increases with the distance from the pivot G.

For instance, at the center or balancing-point of the instrument U, Fig. 1, corresponding to the mouth of the vagina and about one inch from the seat of power, we have the arc increased from three-eights to half an inch, with a total expansion of the arms at this point of two and a half inches. And at the extremity of the blades, a distance of about five inches from the same point, the arc is increased to one and a half inches, giving us a space between the opposing blades of three inches for operative purposes.

At the two points named, the limit of expansion of the blades corresponds exactly with the limit of the dilatation of the mouth of the vagina, and its upper extremity, which alone is sufficient to explain the *self-sustaining* and *self-retaining* feature of the instrument.

In the application of our power then to the thumb-screw K, the position of it is most advantageous for producing its maximum effect in collapsing or carrying the two short levers from their oblique relationship to that of right angles with the point acted upon, thus affording an example of increased power with

increased resistance. The instrument with the above system of leverage may properly be said to represent a *double bent lever*, the most familiar example of which is the *fire-tongs*. Unlike these, however, it has the power applied on the inside instead of the outside. Alike, though, in the important respect of having the power applied between the fulcrum and the weight or resistance, distinguishing both at once as levers of the third class.

This instrument I shall call the *spring and self-retaining speculum*, as is most naturally suggested from these two distinguishing qualities of it.

I think I may justly claim for this speculum originality in:

1st. The system of leverage employed, possessing as it does regulated and increased power, reduced to the smallest possible compass, and far away from the mouth of the vagina, thus allowing the freest and widest range of manipulation with instruments, compatible with the nature of these parts.

2d. Transverse action of the instrument, with uniformly varying movement of the working-point, extending from the heel to the point of the blades, thus making the lateral walls of the vagina the seat of pressure instead of the anterior and posterior, as formerly.

3d. Complete exposure, at the same time, for operative purposes of the vulva, both walls of the vagina and the cervix uteri, with the two polished surfaces of the arms of the instrument standing upon the sides, the most favorable position in which they could be placed to secure the greatest amount of reflected light.

4th. Elasticity of the working-point of the instrument.

5th. Being self-retaining in the fullest sense of the word.

6th. Being equally applicable in its use to all positions of the patient.

7th. Allowing all operations to be done without the aid of assistance, or exposure of the person of the patient, further than the parts immediately brought within the field of observation by the expansion of the arms of the instrument.

All these points, I am safe in saying, admit of the clearest demonstration.

Remarks.—Having now completed the description of our *spring and self-retaining speculum*, it remains for us to offer a few additional remarks upon its application in practice, and the circumstances under which it was first done; for it is reasonable to

conclude that the question will be asked, where is the proof of all the advantages which have been portrayed at such length?

The only proof I propose to offer, and I think this conclusive, is the application of the instrument in a single case, the very one to which it was adapted in completing it as here shown. This case being an extreme one, as will appear, has the advantage, I think, of rendering the proof convincing to the practical mind, and lessens the necessity, I conceive, of additional corroborative testimony to satisfy even the most skeptical. The case referred to was one of vesico-vaginal fistule occurring in a very stout, fleshy woman, weighing upwards of two hundred pounds. Early in October last she was admitted into that admirably conducted institution, under the direction of the Sisters of the Hoboken St. Mary's Hospital, where my patients are now received.

The fistule was of six or eight months' standing; small, not larger than a pin's head, and occupied what we would ordinarily term a favorable position, being some three inches above the *meatus urinarius*, and near the edge of the septum, upon the left side.

The peculiarity and difficulties of the case were these: Ante-version of the uterus; a convoluted or folded condition of the two opposing walls of the vagina, which was of immense size; and a pleated condition of the edges of the fistule, and the parts immediately surrounding it.

Assisted by Drs. Finnell, Connolly, Lynch, Metcalfe, and several other medical gentlemen of New York, and Dr. Chabert, of Hoboken, I undertook my usual operation, the patient resting upon her knees and elbows. My fourth size of the lever speculum, with a blade four inches long, one and a half inches wide at the heel, and one and three-quarter inches near the point, was employed; and although of such large size, this instrument, with spatulas and depressors, brought to bear from various points by assistants, afforded us only an imperfect view of the very small fistule. The upper part of the posterior wall of the vagina came down in such immense folds over the end of the instrument, met by the same folded and protruded condition of the anterior wall, under violent and almost continuous expulsive efforts, that it became quite impossible to commence the process of paring the edges of the fistule, and to complete it in a regular manner. This stage of the operation, however, was gone through with after the length of time indicated, only to be followed by a still greater difficulty

and delay in the next—the introduction of our sutures—only three being called for. The patient, at this stage of the operation, was placed upon her side and chloroformed, which, however, afforded us no relief from the surrounding difficulties.

Suffice it to say, the operation, after three hours, with five or six assistants, was finished, though in the most unsatisfactory manner it had ever been my misfortune to encounter before.

Now, after all our labor and annoyance, I felt that a failure was inevitable, and so expressed myself to the gentlemen present. The removal of our suture apparatus on the eighth day proved too truly the correctness of our misgivings as to the final result. There was a total failure.

With a full understanding now of the difficulties of the case, and seeing the result of the extraordinary efforts which had been made in this operation, I contemplated, I frankly confess, another operation with dread and ill forebodings.

I determined, however, that I would not undertake another until I could devise some plan of securing the patient effectually in the right-angle position upon the knees, which I had had in contemplation for several years; and, if possible, to complete my new speculum, believing that no better case could be found to test its merits. Accordingly, I drew a plan of my *thoracic rest*, alluded to in the former part of this paper, and placed it in the hands of a carpenter, who had it ready for use in five or six days.

As to the speculum, this was not so easily completed, as it involved a radical change in my original plan, arising from a fundamental error in its construction, which I had not discovered until this particular juncture. An explanation of this change would necessarily require a description of the instrument and all the alterations made in it from the beginning, which would far exceed the limits assigned to these remarks in the outset.

On the 20th of November it was so near completed as to enable us to use it.

The patient was now placed in our new position, and thus secured upon the *thoracic rest*. The position was now found to be admirable, and the confinement of the patient perfect.

Chloroform was next administered and our speculum, as here shown and described, was introduced and expanded to the fullest extent. A reference to the limit pointed out on a former page will give some idea of the enormous size of the vagina. In short, the dilatation of the vagina, regarding all the indications which

we have pointed out, was most complete and satisfactory. The insignificant fistule which we had labored so hard to bring into view a few weeks before and failed, now showed itself in its fullest dimensions, steady and immovable, even in the very face of the most violent expulsive efforts of the patient from bearing down and vomiting, before which we stood almost powerless and helpless in the previous operation, with every assistant that could be employed.

I now viewed the parts of operative procedure for the first time with a feeling of certainty as to the result. At my leisure I began the operation, and quietly completed it by my ordinary method, without the aid of an assistant, further than to wash sponges and give chloroform.

In twenty-five minutes our patient was removed from the table and placed in bed, totally unconscious of what had been done. Ten minutes of this time, I should observe, were lost in consequence of a little hemorrhage which had to be controlled before introducing our sutures.

Thus was achieved, I conceive, the greatest triumph of our professional life.

The above operation was done in the presence of Drs. Thomas C. Finnell, Thomas S. Bahan, Joseph S. Crane, of New York, and Dr. Chabert, of Hoboken, all of whom expressed their entire satisfaction at the result.

To Dr. Finnell I am under many obligations for having so opportunely placed under my charge the above patient, so well adapted to the completion of our instrument. Without such an opportunity our success might have been deferred many months longer. There are also due Dr. Chabert many thanks for his kind attention to the patient during the after treatment.

The result in this case, however satisfactory it may be viewed in the important respects mentioned, merits additional interest, I think, from the fact that the instrument actually employed in the case, and from which these drawings have been made, was completed by my own hands in *gutta percha, sheet lead and iron wire*. To Messrs. George Tiemand & Co., 67 Chatham Street, however, I am under great obligations as regards the foot, leverage, and legs of the instrument, and the many changes and alterations made, from time to time, in order to reach this stage of completion. They placed at my disposal an experienced and finished workman, who made and put together almost every part of the

instrument above named under my own supervision. Without this very great advantage I never could have gone through with the work even to this extent.

As regards the ultimate success of this instrument, from what we have seen thus far in its application I think I can very confidently recommend it to the general practitioner as well as the surgeon, as likely to give satisfaction in all cases where a speculum requires to be used.

That a diminution of the size of the instrument shown here will have to be made to suit the majority of cases I am convinced. This is an extra large size. A medium size, I think, will cover four-fifths of all cases; one smaller size, and a larger one, such as here shown, covering the other fifth of the cases. In this last class we include such cases as the one above detailed, and all cases with shortening of the vagina resulting from injury of its walls or otherwise. As soon as we can determine properly the alterations necessary to be made in the proportions of this instrument, in order to reach the other two sizes, we will have them made.

The instrument, when completed in steel and electro-plated, as designed, will not, I am satisfied, exceed the weight of this, our original pattern, which is only eight ounces, being two ounces less than the ordinary lever speculum.

FIFTH AVENUE HOTEL.

Commercial Hospital.

Clinic.

Service of Prof. MENDENHALL, of the Miami Medical College.—Reported by A. GUTHRIE, M. D., Resident Physician.

January 25, 1868.

GENTLEMEN:—I propose to call your attention to a case which has occurred in this house since our last clinic day, having some points of very considerable interest. The history of the case, as recorded in the case book of the hospital, is as follows:

A. M——, (colored;) aged twenty-eight; cook; admitted today, January 23. Advanced in pregnancy about eight months

Health during gestation has not been good. Suffered from an attack of jaundice five months ago, and three months subsequently from an attack of acute rheumatism, the lower extremities being principally involved.

Present Condition.—Strong and robust; a per vaginal examination shows the os to be high up; slightly dilated with considerable protrusion of the membranes and a moderate amount of hemorrhage. No presentation could be detected without endangering rupture of membranes. The pains became stronger, and a dead foetus of about six months was soon expelled, followed by a gush of blood. A per vaginal examination was made, and the placenta was found to be entirely within the cavity of the uterus. Firm pressure was made over uterus, and gentle traction made on cord at same time, and the placenta was soon expelled, followed by another gush of blood. Lumps of ice were introduced into the uterus from time to time, and also applied suddenly over abdomen. At same time the uterus was firmly grasped. This temporarily arrested the hemorrhage, but it recurred at irregular intervals until syncope was imminent; pulse became quick, feeble and irritable; lips pale and ensanguinated; vision confused and respiration irregular; in short the symptoms indicated great danger to the life of the patient. The cavity of the uterus was then syringed out with cold water, and one ounce of Per Sulphate of Iron dissolved in four ounces of water was injected into the uterine cavity, which at once arrested the hemorrhage. A moderate amount of stimulants was allowed; and reaction was established at the end of six hours.

Jan. 24th. Pulse eighty-six; more force; tongue slightly coated white; slept but little; was harrassed some by dry cough, which was ultimately relieved by Syr. Morph.Comp. To have beef tea, etc., for diet.

Jan. 25th. Pulse ninety-two; tongue coated white; one stool looking very scanty; slept well; slight tenderness over uterus. To have Pulv. Ipecac Comp. pro re nata.

By noticing this history it will be observed that the woman had rheumatism about two months since, and our estimate of the age of the foetus is six months, which would place its death about the same time of the rheumatic attack. What relation existed between the rheumatism and the death of the foetus I will not pretend to decide; but it may be well to bear it in mind in reference to future observations of placental pathology.

I will refer the case to Prof. Taylor, Pathologist of this institution, for the pathological description of the diseased placenta, and from which the death of the fœtus occurred, and premature labor as a consequence of its death without doubt. The subject of intro-uterine pathology, as connected with the development of the ovum, is one of great interest, and presents an attractive field of study on account of our meagre knowledge on the subject and the importance which should be attached to it.

An unusual condition in the appearance of hemorrhage, to some extent before and to a greater extent after delivery of the placenta, is presented. We find, according to the calculation, that the woman was about eight months advanced in pregnancy, while the appearance of the ovum was that of about six months development. The dead fœtus must therefore have remained in the uterus for two months, hermetically sealed from contact with the atmosphere by which decomposition was prevented. When the death of the fœtus takes place, the circulation between the mother and child is diminished, and the placenta becomes atrophied, so that when thrown off there is generally but little hemorrhage.

In this case some hemorrhage occurred previous to delivery of the placenta, and the post partum discharge was excessive and persistent, so much so that it did not yield to the ordinary remedies of friction and pressure on the uterus, the hand in the vagina and the introduction of ice into the uterine cavity. The woman continued to lose blood, the pulse become almost imperceptible; faintness followed and she was in an exceedingly critical condition, requiring additional prompt measures. Ergot was used, but it had been in the house for three years, and, therefore, inert, and sometimes it does not act at any rate when the powers of life are at such a low ebb. It was thought best to inject the per Sulphate of Iron into the uterus, which was done as you will perceive by the record with entire success.

I am not aware that this remedy was ever used in *post partum* hemorrhage until employed by myself in 1859; since which it has been used several times in my own practice, and in that of several others with great success. I think it almost a certain remedy if properly used. The uterus should always be cleared of blood by the injection of cold water into its cavity, and then the solution of the per sulphate injected promptly in liberal

quantity. The case is doing well and there has been little or no pain at any time in the pelvic cavity since the injection.

Prof. Taylor will now give you an account of the pathological condition of the placenta:

GENTLEMEN:—The specimen to which I ask your attention this morning, is a placenta removed from a woman represented to be eight months advanced in pregnancy at time of delivery. It is about half the usual size at full time; it is more rigid and denser than normal; the placental tufts are seen in only about one-fifth of its area; the remaining portion showing no tufts and but few of the interlobular sulci seen in health, but instead, a nearly smooth surface, varying in color from light red to nearly white, and offering a marked contrast to the normal deep red of the more healthy portion.

The fetal surface appears normal; the entire organ contained very little blood; the chorion is opaque in patches (the cord, examined afterward, was small and much less spiral than usual; its vessels were pervious).

On examination of the surface just described, I have found it to be a fragile layer of new material covering, and descending between the villi, which, to the unaided eye, appear normal.

Microscopical examination of the tissues reveals fibrillæ or shreds, exudation corpuscles and oil globules; the villi examined were irregular in caliber, contained granules in and on their walls, and little blood.

Two or three theories have been advanced in explanation of the conditions presented in this specimen. By some authorities it is said that from some diseased condition the villi are detached from their uterine connection, this separation being attended by more or less hemorrhage, the blood insinuates between the villi, and between the placenta and uterus.

If the separation be insufficient to produce immediate expulsion of the ovum we have coagulation of the blood, and in process of time absorption of its coloring matter, so that ultimately there remains but a layer of fibrin upon the maternal surface of the placenta.

Another, and I think in this case, a more probable explanation, is that of *inflammation* of the placenta.

This process commences in the substance or on the maternal surface of the placenta, it is usually originally limited to a single

lobule, but it may extend until nearly all parts are successively involved.

As a result of the inflammation we have exudation of organizable lymph, within and on the placenta, as seen in this case.

By whichever method the effusion may have taken place, we now have the same process, viz., contraction of the exudation, by which the subjacent tufts are compressed or obliterated, hence the pallor of the placenta. If organization of the inflammatory exudation occurs adhesion between the placenta and uterine wall results. Such not being the case, fatty degeneration, which is a common method of removal of such deposits, progresses, and if sufficient time elapse before the expulsion of the ovum may effect the removal, not only of the exudation but also the diseased placenta.

In rare cases suppuration may attend the inflammation, and collections of pus are formed between the placenta and uterus.

As you will readily perceive, all the processes mentioned must be attended by one result, viz., the obstruction of the circulation between the mother and child, and if a considerable proportion of the placenta be involved, must occasion the death of the latter, and in all probability determine its premature expulsion, as in the case before us.

Feb. 8th, Prof. Mendenhall again brought the case to the notice of the class in the following remarks: I wish to call your attention again to the case of hemorrhage brought to your notice two weeks ago. The patient is now before you, and you can see that she has recovered entirely, and is now presented ready to be discharged from the house, which will be done to-day. The following account will show the daily history of the case, and from which you will perceive that no lochia containing fresh or red blood was at any time discharged.

Jan. 26th. Pulse ninety; tongue coated white; no stool or lochia; had severe headache last night, which was relieved by Pulv. Ipecac et Opii Comp. grs. x.

Jan. 27th. Pulse eighty; tongue white; one stool; lochia scanty and of yellowish color; slept well; evening, pulse one hundred and ten; tongue more coated; some tenderness in hypogastrium; has severe headache. R. Hydrarg. Submur., iv grs. Pulv. Opii grs. jjj, Chart, iv; S. one every three hours.

Jan. 28th. Pulse one hundred; tongue cleaner; one stool; ten

derness same; lochia scanty and very offensive. To have cavity of uterus syringed with tepid water.

Jan. 29th. Pulse eighty; tongue same; one stool; lochia still scanty and offensive; abdomen not so tender. To have cavity of uterus syringed with tepid water again.

Jan. 30th. Pulse eighty; tongue clean; no stool; lochia scanty, of yellowish color and offensive. To have cavity of uterus syringed with Liq. Soda Chlor. $\frac{3}{4}$ i to Aquæ $\frac{3}{4}$ xx.

Jan. 31st. Pulse sixty-eight; tongue clean; no stools or lochia; did not sleep well on account of pain, which was induced by above injection.

Feb. 1st. Pulse eighty; tongue clean; two stools; no lochia; slept well; no tenderness of bowels.

Feb. 3d. Pulse eighty; tongue cleaner; two stools; no tenderness; slept well. Allowed to sit up one hour.

Subsequent to this nothing of interest occurred.

CLINICAL CURIOSITIES.

TREATED IN THE COMMERCIAL HOSPITAL DURING THE YEAR
ENDING WITH FEBRUARY, 1868.

Reported by Dr. JAMES T. WHITAKER, Resident Physician.

Service of H. E. FOOTE, M. D.

Self-Amputation.

J. Y——, age seventy-one; nativity, Germany; admitted July 11, 1867. Patient had evinced, on several occasions during the past three months, a desire to commit suicide, which culminated yesterday in a self mutilation necessitating his entry.

Condition.—Infirm; partially insane; exsanguine; face perfectly blanched; pulse barely perceptible; thready.

Mutilation referred to was amputation of the penis by a razor. The organ removed by a clean cut apparently from below upward, depending by a strip of the dorsal integument. The incised surface distinctly displays the corpora and urethra. The jagged integument has retracted completely to the pubes, leaving the abbreviated stump, of half an inch in length, entirely denuded. Urine and feces involuntary. Richardson's Styptic Col-

loid, Ferri Persulph., etc., failed to control the hemorrhage which was continuous. Female catheter introduced and stump ligated. Hemorrhage at once checked. Fetor offensive. Acid Carbol. Aquæ æc p. æ, the local application. Beef essence and brandy freely; full diet.

July 12. No further hemorrhage after removal of the ligature. Incised surface presents a healthy appearance. The dressing destroys all fetor. Pulse stronger, better volume.

July 15th. Moderate suppuration. A colliquative diarrhea has supervened. Ordered Hopes Mixt. ʒss every two hours.

July 18. Diarrhea checked; still extremely feeble; pulse thready; suppuration profuse; sloughing of stump; charcoal fermenting poultice ordered and free stimulation maintained.

July 20. Continued sloughing of penis; general condition rapidly deteriorating; pulse still very feeble; dejections continue involuntary; extreme dementia; desires death; brandy and beef essence as freely as possible.

July 24. Continued to sink, and died.

Service of W. W. DAWSON, M. D.

Rupture.

P. R——, age twenty-eight; nativity Ireland; entered July 4th. States that yesterday while at work on the levee, experienced a painful erection of the penis; just at this juncture he received a kick from an enraged cow; felt something "snap" at the time, and observed that the member became immediately flaccid and distended. Refuses any other version of the accident to both entreaty and incredulity.

Condition.—Substantially built; firm fiber; general condition in state of health. Penis enormously distended from root to glans, eight inches in circumference, six inches in length, contorted by a half twist to the left, livid rather below normal temperature; painless; scrotum tinted a deep blue; urine free. Ordered dorsal decubitus: elevation of hips; warm water dressings. R—.Potass. Bromide, ʒss to control the erotic tendency.

July 6th. Circumference diminished to six inches; lividity disappearing in places.

July 10. Continued subsidence of the swelling; hue confined to spots.

July 13th. Considerable induration of the tissue as of organization of the effused material; compression by bandage.

July 15th. Organ nearly normal in size and aspect.

July 20th. Discharged cured.

Service of WM. H. MUSSEY, M. D.

Elephantiasis.

A. D——, age forty; nativity, New Jersy; butcher; entry February 4th 1868.

Six months ago exposed to venereal contagion, two weeks subsequently noticed several sores on the glans, which soon disappeared under treatment. Secondary manifestations two months ago, and about this time the foreskin began to enlarge, harden and roughen on its exterior; at no time painful.

Condition.—Below par; lax fiber; cachectic; digestion feeble; prepuce swollen and indurated to almost the density of seirrhous; mamillated on its exterior with impaired sensibility; a scanty serous exudation from the surface of the tubercles; perforation on its frænal aspect by a small sinus through which an occasional drop of urine finds vent; glans phimosed, the integument of body of penis not involved; odor extremely disagreeable; tonics and nutrient regimen; prepuce enveloped in bandage, saturated in a dilute solution of carbolic acid in glycerine.

Feb. 12. Disease tissue entirely removed by the ordinary operation of circumcision, creaking under the skin like leather. To heal by granulation.

Feb. 20. Granulations proceeding kindly; general condition responding to treatment.

Feb. 24th. Wound nearly healed.

Service of H. E. FOOTE, M. D.

A. W——, age fifty-five; Penn; entry May 7, 1867. Acknowledges several attacks of gonorrhœa, the last four years ago; never syphilis. About six months ago the foreskin began to enlarge and assume its present aspect. The swelling has been very gradual but progressive. Has been failing in health for the past year.

Condition.—Somewhat emaciated; face bears the aspect of cancerous cachexia; circulation feeble; no intra-thoracic disease

detected; whole integument of penis enormously enlarged and roughened by dense nodules; measures seven and one-half inches at center of body; glans buried at the depth of an inch; several fistulæ communicating with the urethra; orifices on the under surface of the body, each covered by a small projection of dense cuticle; scrotum similarly hypertrophied on its anterior aspect; urine free; densely albuminous; attention wholly directed to amelioration of the general condition. Stimulant and roborant treatment ordered. Patient rapidly sank, however, and died two weeks after admission. Autopsy confirmed the diagnosis of renal disease.

The subject of Elephantiasis being under discussion shortly after, Prof. Taylor, Pathologist of Hospital, after reference to this case, stated the generally received opinion of the cause of this disease to be obliteration or obstruction of the caliber of the lymphatics, perhaps by the inflammatory processs preventing the escape of the constantly accumulating products of nutrition. The exact etiology of the disease, he remarked, is still, however, involved in obscurity.

Service of W. W. DAWSON, M. D.

Phagedæna.—Amputation of the Glans.

E. G——, colored; age thirty-eight; nativity Mississippi; laborer; entry November 13. 1866. Average build; good health.

Phymosis, œdema and inflammation of the prepuce; several points of induration on the glans; profuse purulent discharge; severe nocturnal chordee; general constitutional infection. R. Hydrarg. Protiodid gr. ss ter die; Vin. Aromat. Aquæ aa p. æ.; M. S. Inject between glans and prepuce; cold water dressings externally; Potass. Brom. ʒij at eight and two P. M. for chordee.

Dec. 10th. Inflammation and œdema subsided; phymosis persists; circumcision performed to-day; several Hunterian chancres displayed on developing the glans; a deepy excavated ulcer to the right of frenum; no further chordee; Brom. ceased; Tr. of Iodine to ulcer.

Jan. 1, 1867. Ulcer continues to deepen; severe pains experienced; full constitutional effect of alterative. R. Ferri Pot. Tart. Sol. ʒj, ʒj as local application; discontinue Mercury. R. Quin. Sulph. grj ter die.

Jan. 15th. Superficies of sore enlarging on the inferior border;

elsewhere at a stand; iron wash ceased. Hyd. Sub. Mur. in powder substituted.

Jan. 25th. Fistulous perforation into the urethra through the bottom of the ulcer, causing a double stream of urine; at lower border the phagadæna arrested. Treatment continued.

March 1st. Sides and surface granulating kindly; general condition excellent.

March 18th. During the past two weeks has suffered considerably with secondary manifestations; congestion of fauces; cephalalgia erratic pains, etc., which have reacted unfavorably on the general condition; a small ulcer has presented on the opposite side of glans; both ulcers have assumed an unhealthy appearance.

March 29th. Phagedæna has supervened in both ulcers, both have extended their surface and penetrating to union beneath the corona, have separated the glans in nearly one-third its extent from the body. Chloroform administered and amputation of the glans performed to-day, removing with it the entire diseased surface. Hemorrhage profuse, necessitating the ligation of two arteries and the free application of per sulphate iron dressings. Section of a vulcanized rubber catheter retained in the orifice of the urethra.

April 1st. Considerable inflammation of the stump of the organ. Charcoal fermented poultices ordered.

May 1st. During the past month has run through the regular list of hospital diseases, fever, diarrhea, rheumatism, etc. The phagedænic ulceration has attacked the incised surface and is slowly extending. Nitric acid, full strength, applied daily, and a dilute solution as a constant application; full tonic treatment; iron, quinia, ale, liberal diet.

May 11th. But little change; phagedæna retarded but not arrested; general condition slowly improving.

May 15th. The same unhealthy inflammation characterizes the stump, and though it lacks its former virulence will not yield the vantage; Bromide in full strength applied daily with camel hair pencil, and a dilute solution of the same as local dressings. R. Potass. Iodid. gr. xv ter die; tonics, etc., continued.

May 25th. A temporary amelioration followed the change in treatment, but at present there can scarcely be said to be any improvement since the last record. About one-half of the body remains. The surrounding skin has yielded more slowly to the ero-

sive action, and protrudes about one-eighth of an inch. For one-half inch below the irregular surface of the body the integument is detached and forms a loose cul de sac around the corpus. To-day to complete the list, acid. carbol. in solution applied freely after removal of the grayish cast enveloping the surface. General treatment unchanged.

June 3d. Surface has again assumed a healthy appearance. Bright red granulations with a slight discharge of laudable pus everywhere present.

July 1st. The dressing has been constantly maintained, and the healing process is complete. The separated integument has partially united to the body, and the remainder forms an imperfect prepuce. Other complications detained the patient under treatment until his discharge August 19th.

Aromatic wine, tincture of iodine, potassio, tartrate of iron calomel, charcoal fermenting poultice, nitric acid, bromine, and finally carbolic acid.

Is not this a fair exemplification of the efficacy of the last remedy in the treatment of phagedæna? Whether it acts by excluding the organic germs as suggested by its enthusiastic advocate across the water, or whether by some occult and inherent power it combines with and neutralizes the potential agency of destruction in this affection, are problems for time and chemistry. Therapeutically, carbolic acid is as much a specific for phagedæna as quinine for intermittents, or sulphur for the itch; and by its introduction into medicine, Prof. Lister has opened wider the door of conservative surgery. There can be scarcely a doubt but that its employment earlier in this case would have precluded the necessity of mutilation and the endurance of months of suffering.

Service of W. W. DAWSON, M. D.

Gangrene.

A remarkable case of gangrene of the penis, incident to an extensive oedema of the prepuce, terminating in death in thirty hours after its inception, occurred during the month of July. The case was reported in full in the November Lancet, by Dr. Judkins, Resident Physician. It is merely mentioned here to complete the category.

Translations.

Condylome—Collodium Causticum.

(*Revue de Therap.*, 1865, No. 11, page 292.)

Translated by M. HELLER, M. D., of Cincinnati.

THE forty-first number of the *Italian Journal of Medicine* describes the successful application of corrosive sublimate, with collodium, for the destruction of condylome, by Dr. Finco, of *Padua*. This journal describes, among others, the case of a man fifty-six years of age, with an enormous number of this production around his anus, some of small size, and others very well developed, and all became still larger under the application of argent. nitr.

Finco ordered the following formula:

Collodium, fifty-two gramm,
Bichlor. Hydrargyri, twenty-five centigramm.

In this mixture (which needs stirring before it is applied), he dipped a small painter's brush and painted the two largest condylome; on the following day they were nearly destroyed. In this way Finco destroyed, in sixteen days, more than sixty of such productions.

In the treatment of *zona* this formula may be of service, as it belongs in the list of the abortive treatment, leigh nitrate of silver, etc.

I have applied the collodium causticum in three cases of numerous condylome with surprising good results. M. H.

Vaginitis—Medicinal Suppositoris.

(*Revue de Therap.*, 1867, No. 6, page 153.)

From DAMARQUAY.

VAGINITIS is an extremely troublesome affection, no matter from what cause it emanates, and, in general, is of a specific character, yet it may come on spontaneously or from leucorrhea, which gives rise to symptoms greatly resembling gonorrhœa.

One knows that Damarquay cures vaginitis in twelve to fourteen days, by means of tampon dipped in glycerin, which holds

tannic acid in solution (eight to ten gramm tannic to thirty-one gramm glycerin). This dressing can be kept three to four days. John Black, in Philadelphia, made, for the same purpose, medicinal suppositoris, which, according to Marion Sims, gave very satisfactory results. After having tried different compositions, Black prefers the following formula:

R.—Butyr. Cacao, 16 gramm, 75.
 Morph. Sulphur, 16 gramm, 30.
 Sulphas. Ferri Liquid, 144 gtt.
 Cerat., 14 gramm.
 M.—To two suppositoris.

One of this suppositoris must be introduced every two days in the vagina, except during the period of menstruation. Black says that the average number of days necessary for the cure were put down as follows: For the Sulphas. Ferri Liquid, nine days; for Alum and Tannin, nine and a half days; for Ol Copahu, twelve days; Ungt. fod., thirteen days; Ungt. Citrin, fourteen days; Chlor. of Zinc, nineteen days. The most energetic preparations are therefore subordinate to the milder ones. (*Journal de Med. et de Chirurg. Pratig.*)

M. H.

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

Diseases of the Cavity of the Tympanum.

BY A. D. WILLIAMS, M. D., Cincinnati.

ACUTE AURAL CATARRH.—As no other part of the ear is supplied with mucous membrane, and as mucous membranes only are affected with catarrhs, we mean by *aural catarrh*, inflammation of the mucous lining of the cavitas tympani, which divides itself naturally into two stages, acute and chronic.

We know from anatomy that it is impossible to separate, anatomically, the mucous membrane from the periosteum of the

tympanic cavity. The lining membrane of the tympanum, then, must have a compound structure, periosteal and mucous, and must functionate in two ways, as periosteum and as mucous membrane, consequently every acute or chronic catarrh of the middle ear must be at the same time an acute or chronic periostitis. Every one knows how apt this latter kind of inflammation is to involve sooner or later the bony tissue beneath it. Hence we can easily understand the great danger to the bone, and consequently to life, in all these tympanic inflammations.

Acute aural catarrh has a common cause with inflammations of mucous membranes in general; "catching cold" is the popular and correct idea of its starting-point. Changes of the weather, exposure to strong cold winds, getting wet through, together with a predisposition in some persons to mucous inflammations, may be put down as its common exciting causes. Tröeltsch says he has observed it following mostly upon chronic aural catarrh of long standing. My experience would lead me to think that it most frequently follows, or is an extension of an acute catarrhal inflammation of the mucous membrane of the nose and throat, popularly known as "cold" in the head and throat. At all events the nose and throat trouble nearly always accompanies the acute aural catarrh, and my impression is that the former is the original disease, and that the latter is an extension of it into the middle ear. Generally both ears are similarly affected. The attack usually comes on sudden.

DIAGNOSIS—SUBJECTIVE SYMPTOMS.—The patient suffers intensely. The pain extends to the face and to the whole side of the head, particularly to the front part. If both ears are involved the whole head aches severely. The suffering extends occasionally even to the teeth. Tröeltsch says: "It is sometimes difficult to tell whether the pain is in the upper molar teeth or in the ear." Generally there are painful exacerbations at night—patient can not sleep, and can not get even a little rest, for want of which he is rapidly pulled down. Great heaviness and fullness about the ear is complained of. Deafness in a large degree, sometimes complete, is among the first complaints the patient makes. Prominent among all these afflictions are the severe noises in the ear, which are constantly present. Bells, hammers, steamboats, and nearly everything else, are heard. Patients may think these are real, and look around to see where they come from. The sharp pain in the ear is increased by swallowing or

movements of the lower jaw. According to Trœltsch, pulling upon the external ear or pressure upon it does not increase the pain. This is one of the diagnostic symptoms between this disease and acute myringitis. In the meantime febrile disturbance of the general system shows itself, and increases in the evening and may cause delirium. Vertigo is not unfrequently present.

From this array of symptoms of suffering, together with the more or less complete deafness, we may easily infer the sad condition of the patient, and imagine his peculiar expression of countenance. Under such circumstances is it not possible that acute aural catarrh may be taken for meningitis or cerebritis? Trœltsch affirms that such is often the case. Their symptoms are certainly very similar. These head symptoms in all probability depend on the pressure upon the filaments of the great sympathetic nerve, which are quite freely distributed to the tympanic plexus, which lies upon the promontory. In all such cases there is also considerable pressure upon the fenestra rotunda and fenestra ovalis. The membranes of these fenestræ are pressed inward upon the fluids of the labyrinth, and consequently its force is expended there. This, again, may give rise to the head symptoms and is possibly their *chief* cause.

In children where acute aural catarrh, according to Trœltsch, is quite common, before they are able to talk and tell their suffering, it is certainly a very difficult task to diagnose between a brain disease and such an aural trouble, where there is nothing about the child's ear to attract the attention of the physician.

OBJECTIVE SYMPTOMS.—These are but few. The external meatus is natural except an increased redness of the membrana tympani, which is due to the inflamed condition of the mucous membrane inside, shining through it. The membrane loses its natural glistening appearance to some extent. The handle of the malleus is commonly visible, showing that the seat of the disease is deeper down than it. The cone of light is usually reduced to a mere point or obliterated entirely. The general appearance of the membrane will vary, however, according to the stage of the disease at the time of examination, so that it is impossible to describe it definitely. As already stated, the throat and nose are acutely inflamed, the patient having more or less difficulty and some pain in swallowing.

The *prognosis* in the main is favorable, particularly when the membrana tympani is not already perforated, which sometimes

takes place very early in the progress of the disease. The cavity of the drum fills up completely in the course of a few hours, after an attack of acute inflammation, with a muco-purulent secretion. This continues to accumulate and presses more and more upon the membrana tympani until finally it either ruptures or ulcerates through in consequence of the severe pressure upon it. The collection within the cavity now discharges externally and gives the patient relief. If, in this process, a considerable portion of the membrane is destroyed, the prognosis, so far as the hearing is concerned, is unfavorable, not that it will be necessarily destroyed, but will be more or less imperfect. A small perforation from the size of a pin's head to that of a grain of wheat may heal and not impair the hearing power in the least. Tröeltsch cautions us against a too favorable prognosis in such cases, for, according to his experience, which is extensive, the ear, after one attack, is liable to have repeated attacks of inflammation. This is certainly true, if the acute subsides into a chronic form, accompanied with more or less discharge from the external meatus.

TREATMENT.—Recall for a moment the condition of the ear. The mastoid cells and cavity of the tympanum are distended with mucus and pus. The walls of eustachian tube being involved in the inflammation swell and block the caliber of the tube, and thus prevent the exit of the collection in the cavity by the only natural outlet it has. The trouble here is, therefore, very similar to the pent up matter in a deep-seated abscess. Cut it open and it will get well. Give exit to the pent up secretions in the drum, the patient is speedily relieved and the ear will begin at once to improve. This is best accomplished by the introduction of the eustachian catheter (the method to be described hereafter) and the inflation of the middle ear. The wind in passing mechanically opens and frees the tube, and thus allows the confined accumulations to discharge into the throat. This is certainly the most rational method of treating acute aural catarrh, so soon as a certain diagnosis is made out. The inflation indeed will either confirm or disprove the correctness of the diagnosis. If the middle ear is free, there is no catarrh; if it is full of secretions, its presence is proven. Instead of the inflation being a painful operation, as might be supposed, it affords almost instant relief from the distressing symptoms. This we would naturally infer from the nature of their cause. It gives also the very best

security against injury or destruction of the membrana tympani and the little bones of the ear.

Whether inflation is resorted to or not, the patient should be purged energetically with some saline or drastic cathartic. In severe cases from two to six leeches should be applied either in front of the tragus or in the orifice of the external meatus, first filling it with cotton to prevent them from crawling in and causing trouble. If the symptoms are not yet relieved, warm applications should be applied. Fill up the ear with pleasantly-warm water every hour and let it stand some minutes. In its stead a warm solution of morphine (two to six grains to the ounce) may be used. Finally the patient is to be confined to his room—better, perhaps, in bed—and if he does not rest give him an opiate, particularly Dover's powder, which promotes perspiration.

It is almost impossible to use inflation in children and infants. With them the surgeon will have to get along without this most important part of the treatment. If the accumulation once breaks through the membrane, that will afford relief. I am not sure but that sooner or later puncture of the membrana tympani in children under such circumstances will be advised. It would certainly be better to puncture it than to allow it to be ruptured or to ulcerate. The serious symptoms of acute aural catarrh, without treatment, may last a week or ten days; with it they will subside sometimes in a few minutes, and again in twenty-four hours. The throat and nose should be treated as soon as the acute symptoms begin to subside. At first movements of any kind about the throat are so painful that the patient will not bear them.

In all these cases the tendency is for the acute to subside into a chronic form, and then last indefinitely.

Chronic aural catarrh together with *tympanic otorrhea* will be the next subject.

I SELECT the following admirable synopsis of the *Treatment of Trachoma*, from STELLWAG ON THE EYE, a translation just published, and which I propose to review in our next issue.

E. W.

Treatment.—We should first very assiduously attempt to remove the cause of the disease, but afterward the treatment is to be so conducted that the proliferation of tissue shall be limited, and the already existing trachomatous new formations removed without injury to the normal elements of the conjunctiva.

A. Among isolated collections of persons, e. g. among soldiers, in asylums, prisons, manufactories, etc., we must see, above all things, to the prevention of the disease. For this purpose all the causes of the trachoma should be carefully considered, and the proper hygienic rules be insisted upon. But if the disease has already broken out, the prevention of contagion should oppose a barrier to its extension. Separation of the affected from the healthy, and when this is not possible, limitation of their intercourse with each other, form the chief object of attention from the medical attendant.

In individual cases the indications from the cause will demand the removal or keeping away of all injurious influences which may possibly increase or maintain the process, and therefore the eyes should be carefully protected. Besides, where one eye is affected, the transference of the secretion to the healthy one should be prevented were it is possible. For this purpose it is necessary, so long as the process remains acute and runs its course with the secretion of muco-purulent material, to protect the eye with hermetical, or at least a protective bandage. But if the trachoma has already become chronic, it need not be worn, in consideration of the slight contagious property of the secretion, and the annoyance of a bandage. We may then avoid contagion by the greatest care in washing the face, use of the hands, etc. Careful patients may very often prevent the affection of the other eye.

B. The direct treatment of trachoma varies exceedingly, according to the manner in which the disease is developed, according to the intensity of the tissue proliferation process, the form and extent of the trachomatous neoplastic formations, etc.

1. If the trachoma appears with the symptoms of a *blennorrhœa*, attention is to be directed to it rather in a prognostic than therapeutic way. Trachoma first influences the indications to any extent, when the dangerous condition of things has been removed, and the trachoma, as such, appears in the foreground.

2. If the form of the disease has changed in this way, or if the trachoma has been primarily developed, the severity of the inflammation at the time will determine the choice of methods of treatment. Wherever the *sthenic* character of the disease appears prominent, or a condition of severe irritation, the antiphlogistic treatment is the only proper method, whether it be in the beginning of the disease or during an exacerbation. Every irritating procedure is to be strictly avoided. The means for this are

strict care of the eyes, a general antiphlogistic regimen, the use of cold applications, instillations of a solution of atropine, etc.

3. If the relaxation of the conjunctiva is already observed, and there is no marked injection of the vessels in the episcleral tissue, it is time to attempt the removal of the trachomatous neoplastic formations by direct treatment.

We can not conceal the fact that it is harder, in practice, to learn this point of time than in theory. There are cases in which all the above indications seem to be fulfilled, and yet direct treatment of the trachoma will not be borne, but excites exceedingly severe and even dangerous exacerbations of the inflammatory process, which make an immediate return to an antiphlogistic treatment necessary.

On the other hand, cases occur in which the inflammatory proliferation of tissue, in spite of all antiphlogistic treatment, continues, with all the symptoms of severe nervous irritation, for weeks. From a theoretic stand-point every irritative means of treatment appears to be contra-indicated, and yet this is what it actually requires. Happily such cases are comparatively rare, and we may easily protect ourselves from mistakes by first experimentally employing the weaker modes of direct treatment, if the condition of severe irritation be too protracted.

The scissors, nitrate of silver, and sulphate of copper, are the direct means of treatment of trachomatous neoplastic formations.

Sugar-of-lead was at one time used, and much was said of its efficacy. It was used both in concentrated solutions and in the form of a powder. (*Buyx, Warlomont*) Both preparations were placed in large quantity on the trachomatous conjunctiva, and after they had acted for a time, the excess was removed with lukewarm water. Thus a slough was formed which covered the whole penciled conjunctival surface and enveloped the granulations. This slough was very adherent, and it was often several days before it was loosened. In the mean time it acted as a foreign body, and as such was very troublesome. It even increased the existing irritation and the proliferation of tissue, so that it was not rare to see the granulations grow instead of decrease under the slough. This occurs the more readily because the slough remaining behind prevents, or at least weakens, the effect of the lead on the neoplasia. In a similar way, tannin, tincture of opium, dilute nitric acid, etc., have been tried, but the results

attained are far inferior to those from nitrate of silver or the sulphate of copper.

The choice of the remedy is generally determined by the form, size and consistency, of the trachomatous new-formations.

a. Cock's-comb or cauliflower granulations, or those which are very prominent and comparatively large and pedunculated, should be cut off with the scissors. It is imperatively necessary, in doing this, to avoid any injury to the proper conjunctival tissue: otherwise cicatrices are formed which do harm. This is the reason that, in granulations with a comparatively broad base and slight elevation, the scissors are not to be recommended. Besides the granulations are not easily brought within the blades of the scissors, without at the same time getting the conjunctiva between them.

The patient is placed on a chair during the operation. An assistant, standing behind him, supports the head and the everted lids, while another restrains the hemorrhage. The granulations are cut off with scissors curved on the flat. One granulation should be cut off after the other, close to the base. The operation therefore demands much time and patience, but is not painful, provided the scissors do not cut the conjunctiva. It should be remarked that it would cause great trouble to attempt to cut down the granulations smoothly to the conjunctiva. We should be contented with cutting off the more prominent granulations down to a slight residuum. Cauterizations with nitrate of silver should do the rest. Yet these should not be undertaken before one or two days after. Cold applications are to be made immediately after the operation, in order to restrain the hemorrhage and limit the reaction.

b. Large, very prominent, but diffuse granulation, with broad bases, are best subdued by the use of the mitigated nitrate of silver.

c. In severe mixed trachoma, as well as in the diffuse form, where the granulations were either slightly developed in the beginning, or cut off by the scissors or the mitigated stick, so that their breadth was greater than height, pencilings of the roughened conjunctival portion with strong solutions of nitrate of silver, fifteen to thirty grains to the ounce of distilled water, are to be particularly recommended.

d. In such cases, if the smoothing out of the granulations is already far advanced, or if we are dealing with a low form of

mixed trachoma, a pure papillary or granular trachoma, pencils with a weaker solution, five to ten grains to the ounce of water, are to be advised. Then we wish the formation of very thin sloughs, because the deeper action of stronger caustics may easily endanger the proliferating conjunctiva itself, and cause the formation of cicatrices. The choice of the strength of the solution depends upon the desired effect. The caustic will be the weaker, the smaller are the neoplastic formations.

e. It not unfrequently occurs, that in some parts of the conjunctiva, especially in the vicinity of the convex tarsal border, permanent granulations of considerable size remain, while in other places the trachomatous roughness rapidly yields to the means in question. In such cases the prominent excrescences should be removed with the migrated nitrate of silver (nitrate of silver and nitrate of potash,) but the other parts of the conjunctiva pencils with the proper solution.

f. If, after the smoothing-off of the trachoma, the conjunctiva remains very much relaxed, if the catarrhal secretion appears quite abundant, and we therefore require rather a strong astringent effect than a powerful cauterization, the best means is the use of a crystal of sulphate of copper, or an ointment of five grains sulphate copper to two drams of simple cerate.

g. In secondary gelatinous trachoma, also, the sulphate of copper is to be recommended, so long as papillary or diffuse granulations of large caliber do not demand a strong caustic action.

The broad surface of the crystal has the advantage, that the greatest chemical action affects the most prominent points, and in this way remains of granulations may be cauterized, while the portions of conjunctiva lying between, experience the astringent action. Sulphate of copper, with vigorous use, is indeed a caustic, and was for a long time almost exclusively used in the treatment of trachoma. It is only recently that it was displaced as a peculiar caustic by solutions of nitrate of silver, and properly so, since these latter act much more powerfully and more certainly.

The sulphate of copper ointment furnishes a very advantageous substitute for the crystal, especially when the patient can not visit the surgeon every day. The patient may easily introduce the ointment into the conjunctival sac by means of a camel's-hair brush, or allow it to be done by others.

We may also use the sulphate of copper in solution, $\frac{3}{j}$ ad $\frac{3}{j}$ aq.

destilat; penciling it on the conjunctiva in the same way as the stronger solutions of nitrate of silver. Still, it is much inferior to the latter where we desire a powerful effect.

The object of the cauterization is to bring the conjunctiva back to a normal condition. Remembering this, we can not be sufficiently warned of the danger of deep cauterizations, especially with nitrate of silver in substance, for this always leads to the formation of extensive cicatrices. It may be considered as a rule, without exception, that at each cauterization, even in cases of very severe trachoma, we should confine ourselves to the production of a very superficial slough. A second rule requires that the caustic should not touch parts where there are no trachomatous formations.

Instillations are, therefore, to be utterly abandoned. Weak collyria do no good in a trachoma, and stronger ones act upon the ocular conjunctiva and the cornea, as well as on the trachomatous granulations. They are, therefore, dangerous in proportion to their curative action on trachoma.

Generally we should use the caustic once a day. A more frequent repetition is not advisable. The best time for the application is the morning, two or three hours after awakening from sleep. Immediately after sleep, the conjunctiva appears hyperæmic, and the caustic irritates much more. For the same reason, cauterization immediately after a meal should be avoided. Just before a meal is also not a proper time, since the irritation caused may be easily increased by mastication, and by a full stomach.

We should think, however, that the cauterization is to be carried on every day until the trachoma has disappeared. We should never neglect the exact examination of the conjunctiva and the neighboring parts, before we proceed to the application of the caustic. It very often occurs, that some injurious influence has temporarily increased the irritation of the eyes. This may be recognized more especially by a greater injection of the fine episcleral vessels, by sensitiveness, profuse lachrymation, and a lighter shade of the redness. If this be the case, the cauterization should be omitted, and a pure antiphlogistic treatment substituted, until these symptoms of irritation have again disappeared. If this precaution be neglected, and the cauterization continued in spite of the warning indications, the result is generally a considerable increase of the inflammation. Herpetic efflorescences then very often shoot up on the conjunctiva or

cornea, which not unfrequently endanger the eye. At any rate the patient will not tolerate the continuation of the caustic, and we are finally compelled to give up its use for weeks at a time. Then the conjunctiva has an opportunity to allow the formation of the trachomatous growths to reach the former or a greater size.

If trachoma has once become chronic, and if the irritation which is apt to accompany the first stages has yielded, we should have no object in confining the patient to his room any longer. The enjoyment of the fresh air is necessary under such circumstances. Still the patient should be warned as to any excess. He should take proper care of the eyes, and avoid all causes that may produce congestions of the upper half of the body.

4. Cases exceptionally occur, particularly of ancient trachoma, which offer a remarkable resistance to the means of treatment which have been named, and in which, after energetic cauterization for weeks, no change in the condition is to be observed. A marked advance in the degeneration of the conjunctival tissue has then occurred. We also here and there meet with cases of chronic and even inveterate trachoma, in which cauterizations are not borne at all. They react on every application with very severe and permanent irritation, if not by herpetic affections or other forms of keratitis. In such cases, whether with or without pannus, we may use lukewarm compresses or cataplasms. (*Grafe.*) Occasionally these are useful in relaxing the tissue, and thereby favoring resolution, besides markedly diminishing the sensitiveness. In some cases, even a spontaneous recession of the granulations has been seen. In some cases, cauterizations begun with care, and increased, are again borne, and become useful. *Aqu chlori* is also highly spoken of under such circumstances. (*Grafe.*) In particularly old and obstinate affections of this kind, if accompanied by pannus, we may try the inoculation of blennorrhœal secretion, and we may perhaps attain good results with it. (*Piringer, Bader.*)

5. It is time to stop the cauterizations, when the trachoma has been so far subdued that it requires oblique illumination from a lamp to show any irregularities in the conjunctiva, and if the redness remaining has a tint of yellow in it, and the swelling has lessened.

It will be best, perhaps, to gradually increase the intervals between the cauterizations, cauterizing every two days at first, and then every three or four days.

The object of these experimental cessations of cauterizations is to ascertain if the proliferation of tissue in the conjunctiva still continues, and if the slight remaining unevenness of the conjunctival surface be not merely a symptom of a hyperæmic swelling of the papillary bodies, kept up by the cauterization itself, and which immediately disappears when this influence ceases to act. It not unfrequently occurs that inexperienced practitioners protract such slight hyperæmic swellings excessively by continuous cauterization. But, even after complete disappearance of the roughness of the conjunctiva, the patient is not to be considered as safe. In order to prevent a return of the affection, the eyes should be carefully used for a long time.

6. If, in ancient trachoma, hypertrophied conjunctival folds of some breadth are found in the palpebral fold, these should be cut off with the scissors close to their base, since they do not readily yield to cauterization, as experience teaches us, and they may, with good reason, be esteemed the cause of the persistance of a great irritation. In the early stages of trachoma, such large folds do not easily occur, and they are of less significance, because they are apt to disappear with the recession of the trachoma, as we may see in the semilunar fold. Under such circumstances, their removal by the scissors would not be justified.

7. If corneal pannus is combined with conjunctival trachoma, the method of treatment is to be the same as if there were no pannus. This generally disappears under treatment, or becomes a permanent corneal opacity, before the roughness of the conjunctiva is subdued. But if the trachoma is united with a pannous keratitis, or herpetic keratitis, it is generally advisable to limit ourselves to antiphlogistic treatments as long as the inflammatory symptoms, and especially the nervous symptoms, predominate to any great degree. It is only when this method of treatment remains without result, in spite of a very good condition of the patient, that we may undertake experimental cauterizations of the conjunctiva with weak solutions. Occasionally under their use the inflammation recedes very quickly. Not unfrequently, however, it increases very markedly, and may even put the eye in great danger. Occasionally the ointment of the yellow oxide of mercury does good service under such circumstances, especially when the herpetic character is a little more prominent and the severest symptoms of irritation have yielded:

In doubtful cases of this kind, an elliptical piece has been cut

out from the lid, and it is claimed that good results have been attained by this treatment. It is believed that the pressure of the lid is thus diminished, and the nutrition of the conjunctiva and cornea favorably acted upon. (*Græfe*.)

8. If either lid be everted, its replacement should be immediately attempted. In the first stages of acute trachoma this will often be sufficient. But if the lid again becomes everted, in consequence of the distension of the cartilage, so long as the inflammatory swelling is very great, it is better, when rigid antiphlogistic treatment is necessary, to leave it for the time in its abnormal position. If then the swelling gradually decreases, and relaxation takes place, the ectropion may be readily acted upon. If the eversion be only partial, the cauterization of the conjunctiva is generally sufficient, together with the contraction thus caused, to relieve the trouble. But if the eversion be complete, the lids should be replaced and kept in their proper position by an appropriate bandage. As long as the bandage is used, cauterizations with nitrate of silver are not to be recommended, because the throwing off of the thick eschar is rendered very difficult, and irritation favored. Sulphate of copper is to be preferred until the lids will remain in their normal position without a bandage, when cauterizations with nitrate of silver may be undertaken. It is less useful to use the nitrate of silver from the beginning, and then apply the bandage after each throwing off of the eschar.

Slitting up the lower canaliculus is superfluous, under such circumstances, since the ectropion may be almost always perfectly overcome.

Correspondence.

"Pleasant Drugs"—The Use of Unofficial Medicines.

EDITOR LANCET AND OBSERVER:—In the *Lancet and Observer* for January is an editorial entitled "Pleasant Drugs," wherein a resolution that I presented to the last meeting of the American Medical Association is referred to, the substance of it, according to your understanding, is given, and then you say: "It strikes

us that the tendency of such expressions of opinion is, to say the least, exceedingly injudicious, and rather calculated to retard than advance the progress of a desirable state of the pharmacy."

The resolutions referred to are as follows:

"Resolved, That the habit of using unofficial preparations of medicine by physicians, except where there is no officinal preparation that will answer the purpose as well, is unscientific and imprudent, tending to demoralize the therapist and to encourage irregular pharmaceutists and nostrum makers, and should be abandoned.

"Resolved, That the profession should not patronize druggists who are engaged in the manufacture of nostrums."

We will consider the first resolution.

I can not but believe that you misapprehend the essential points presented by this resolution. The word "habit" is of prime significance, but you seem to overlook it entirely. A person in the *habit* of doing a thing does it automatically, without reason or thought of why he does it; the fact that he did it before being the only motive that impels him to do it again, and even that force acting without recognition at the time.

This clearly leaves the way entirely open for every physician to make an intelligent trial of every new preparation, or an officinal medicine in a pleasanter form, whether conceived by himself or presented by another; and if the new agent is found better than anything of its kind of an officinal character, either through personal experience or the testimony of other competent persons, the resolution offers no condemnation, even if such agent is used *habitually*, the same as an officinal medicine is used.

What is then in this that can be fairly characterized as "calculated to retard rather than advance the progress of a desirable state of pharmacy," or that can be properly stigmatized as "an exceedingly injudicious expression of opinion?"

After quoting from the resolution that an unofficial medicine should not be used, "*except* where there is no *officinal* preparation that will answer as well," you say "an exception, of course, that makes considerable of a loophole, nevertheless the meaning of the resolution we presume to be pretty well understood." It was my opinion, also, that "the meaning of the resolution was pretty well understood," because the language of the resolution was carefully selected to make it express what was intended, and if I do not over or under-estimate the force of the phraseology, it presents the point aimed at with prominent distinctness, and

without circumlocution or Delphian dubiety. Your language contains an inuendo that the resolution was covert, and susceptible of a double interpretation, Janus-faced, presenting one aspect to the common hasty observer, and another to the acutely critical reader. I am curious to know what you think the resolution does mean, and by what rule of interpretation you discover something other than that presented by the normal signification of the phraseology employed.

In your opinion a physician living up to the spirit of that resolution would be denied the use of Elixir of Cinchona. This is certainly an erroneous view, arising, perhaps, from a mistaken notion of the similarity of the Elixir and the *Tr. Cinchona Comp.* You say: "Thus, for instance, as an agreeable substitute for the old Huxham's Tr. of Cinchona, many physicians find the preparation known as the *Elixir of Cinchona*, a most happy and acceptable preparation. The serpentaria is omitted, and the proportion of cinchona not precisely the same; but instead of a disagreeable bitter tonic, we have a highly acceptable aromatic tincture." Huxham's Tr. is made with four troy ounces of red bark to *two and a half* pints of tincture, while the Elixir is made with four troy ounces of yellow bark to *nine* pints of tincture. You may, therefore, well say that "the proportion of Cinchona is not *precisely* the same," and other differences in the ingredients make the two preparations so dissimilar that one may not be used as a substitute for the other, consequently a physician wishing to prescribe the Elixir need not be troubled about its having a counterpart in the pharmacopœia.

But even if the two preparations were identical in their essential strength and therapeutic value, but the Elixir the more agreeable to the patient, my resolution would encourage the physician to prescribe it, because "no officinal preparation would answer the purpose as well." "Pleasant drugs" have long been a desideratum in my estimation, and I can not quietly submit to be classed as in opposition to any movement that will render medicines more palatable and agreeable, and does not thereby destroy or lessen their efficiency.

The foregoing line of argument will serve for all the really meritorious unofficial preparations that are now in use, or that may hereafter be presented, and, consequently, my resolution can not be consistently construed into an impediment to such im-

provement as may be made in our pharmacopœia "by stimulating the exertions and careful study of legitimate pharmacy."

What was intended, therefore, by my resolution was not to put a stumbling-block in the path of improvement in pharmacy, nor in the slightest degree to impede the introduction of new remedies of value into the common use of physicians, nor to oppose the least obstacle to the transmutation of nauseous into "pleasant drugs," but to sound the note of alarm to an evil already of portentous dimensions, and rapidly increasing under the active cultivation of those interested.

To illustrate: A manufacturing pharmacist will make, from two or more articles of the legitimate *materia medica*, a compound, and call it by a name apparently signalizing its composition approximately—for example, Iodide of Lime—aspire to it such virtues as he thinks would make it sell, and such as it might have, sends samples to a few credulous physicians, who, in their innocent simplicity, think they really find its therapeutic action as described, and say so in an enthusiastic note to the generous donor. On this slender foundation the manufacturer declares that the most eminent physicians have found the Iodide of Lime to be more efficacious than was anticipated; that it is so much more pleasant than the Iodides of Potassium, Sodium, etc., the dose so much smaller, and in every way so superior that it is fast superseding them in the hands of all careful and intelligent practitioners. This is a satisfactory introduction and a sufficient indorsement to numbers of easy-going physicians, and the new remedy has a run until the fashion changes, or some scientific inquirer demonstrates that it is devoid of medicinal virtues, and that even its appellation is a misnomer, adopted to aid in the creation of a deception, and to carry on a delusion.

A manufacturer of this class gets up many preparations, and to bring them to the notice of the profession, circulars are published and distributed broadcast over the land—unexceptionable in diction, and beautiful specimens of the typographic art—traveling agents, polite, affable, with voluble tongues, are sent over the country to carry the glad tidings of great joy, not directly to the people but to physicians, and through them the blessings of the new *therapia* shall cover the land even as the waters cover the sea.

Several of these houses publish neatly gotten up periodicals, at a nominal price, to be paid for at the end of the year, *if the party*

to whom the paper is sent deems it worthy of being paid for at that time, purporting to be devoted to the general interests of the medical profession, and particularly to chemistry, pharmacy and *materia medica*; but, of course, the real purpose is to advertise the wares of the proprietors. All hooks, snares, and traps are baited with such tempting worms, fruits, or grain : s the victim to be caught loves best; accordingly these periodicals are not devoid of many true and good sensible articles, among a host of letters, certificates, commendations, and other fine writing in highest laudation of the surpassing excellence of the pharmaceutical preparations of the proprietors. Now this is all bosh, no more credence should be given to the contents of these papers than is accorded to the declarations of the proprietors of quack medicines so abundantly paraded in the daily papers. Indeed, it may be laid down as a general rule that any manufacturing pharmacist who publishes a periodical is a party whose preparations should be carefully left out of all prescriptions, and whom it is best to avoid when one goes to buy medicines. All such parties are loaded with guile.

The tricks of the tribe who are testing the gullibility, and attempting the demoralization of the profession that they may sell their preparations, are more specious, more refined, more acute than those who ply the public with quack medicines, but not a whit more reputable. The essential difference between the two is, that the latter select the mass of the community for their field of labor, while the former undertake to cultivate the medical profession only; the end and aim of both being to sell proprietary medicines of unknown composition, and often worthless, for extravagant prices. Physicians are visited in their offices by an agent, who brings specimens of some officinal medicines made by his employers, and samples of all their special preparations. The officinal medicines he asserts are pure, and about all the pure ones that are on the market. The unofficial preparations, however, are just what the profession has long wanted; they are made perfect only by his house, because no other has devoted years to the study of such combinations. Other parties, stimulated thereto by the great reputation of these medicines, have prepared something bearing the same or a similar name, but none are genuine or good but these, and you should be particular to specify the products of this house in your prescriptions. Nay, further, the authors of these circulars and periodicals will as-

sume to teach us what diseases and pathological conditions each preparation should be prescribed for. Verily, it is time to be on guard, when our pharmacist impudently constitutes himself our instructor in therapeutics.

Moreover, these imposters will call drugs by wrong names, will declare their preparations officinal when they are not, will give officinal compounds a new title and claim them as special medicines of their own concoction, for the purpose of deceiving careless and inattentive physicians into the prescribing of their medicines.

Do you say, all this may be so, but point us to some tangible evidence of its truth? Certainly! In the same number of the *Lancet and Observer* that contains the editorial under review, may be found a long advertisement by an extensive house making various medicinal preparations. It opens with a catalogue of nearly seventy compounds, some officinal, some otherwise, but each followed by a succinct statement of its therapeutic value, and the pathology it will correct. There is also given a description of "Fluid. Opii Deod. U. S. P." with its therapeutic status. There is no such preparation in the U. S. Pharmacopœia. Then follows a long list head-lined "Sugar-coated Pills and Granules of the United States Pharmacopœia." There are no such things in the Pharmacopœia.

This advertisement closes with this significant announcement: "To Physicians! We constantly receive letters from physicians, complaining that they can not always obtain such of our preparations as they desire to use, and often have others of an *inferior quality* substituted; to provide for such instances, if they will write us, we will give them the names of druggists near them who keep a full assortment of our preparations." Is not that the boldest charlatany?

In the advertising sheet of the same number of the *Lancet and Observer* there is a short, pointed essay, ascribing great medicinal virtue to "Ferro-phosphorated Elixir of Calisaya Bark," when made by a particular house, but when made by any other house it is good for nothing. This same New York house says that the State Assayer of Massachusetts pronounces their Cod Liver Oil "the best for foreign and domestic use." Surely that must be a prime oil that is just as good for the Chinese, Hottentots and French as for Americans. It must be because Massachusetts owns Cape Cod that her State Assayer is cited as high authority

as to the foreign and domestic value of a particular brand of Cod Liver Oil. This same house also publishes this important notice; "Ferro-phosphorated Elixir of Calisaya, with Sub-carbonate of Bismuth. This combination has now become exceedingly popular with the first physicians of the country, by whom it is efficiently and successfully used in gastralgia, laborious digestion, acid eructations, nausea, debility, and nervous derangements." In what do these differ from quack advertisements outside of medical journals?

Further on in your advertising sheet the proprietor of an "Imported Tonic" says of it: "It is prepared in *Paris*, by an eminent chemist—M. Jules Farrat—from a fine, pure SHERRY. It has the approval of the Pharmaceutical School of France, and is in constant use by the physicians there. The prominent physicians of New York, and throughout this country, have also proved its excellence, and it is considered the MOST VALUABLE ARTICLE of its kind at present in use." Wonder how much money the United States receives as duty on this "Imported Tonic?"

Still further on comes the "Injection-Brou," and its proprietor says. "This injection, approved by several academies of medicine, is so well known for its sure and prompt action that it is called INFALLIBLE. It is used without any internal remedy, and enjoys a worldly renown." *Worldly* is good! and the whole quite Frenchy, but reads very much like an announcement in the daily papers by a common quack, who makes a specialty of venereal diseases.

The same proprietor has "Papier D'Albespeyres. For entertaining the suppuration of Blisters." But he does not explain how the suppuration is *entertained*.

These references are enough to establish my point, I presume, although I have by no means exhausted the advertisements of objectionable medicines in this single issue of your journal. And the *Lancet* and *Observer* is not singular in this respect. Nearly every medical periodical one picks up has its proper contents sandwiched between a prefix and suffix of such quack advertisements. Beside this I have now upon my table a bottle of wine, sent to me by the manufacturer, through a city apothecary, that I may examine, approve, and prescribe the wine for my patients. It is accompanied by a printed circular declaring its purity and proclaiming its virtues, and proving both by the certificates of sundry parties, and among these is the following:

"NEW YORK, March 11.

"Having made a careful analysis of the wine prepared by Mr. Alfred Speer, we do not hesitate in pronouncing it pure; it contains all the properties of the Port Grape, and, therefore, for medicinal use, it is, in most cases, superior to other wines. Its principal effects upon the system are mildly stimulating, diuretic, sudorific and tonic. It will prove beneficial in affections of the kidneys and chronic diseases, with general debility of the constitution. Physicians may safely recommend it to their patients."

"JAMES R. CHILTON & CO., Analytical Chemists."

Now one of two things is manifest, either J. R. Chilton & Co. never gave the foregoing certificate, or they have transcended their proper sphere. What does an analytic chemist know of the medicinal virtues, or the therapeutic application of any substance submitted to him for analysis? As a chemist nothing whatever; and he risks the ruin of his reputation by allowing the publication of such a certificate as I have quoted.

It is these preparations, and hundreds of others such as these, that my resolution sought to condemn the habit of using. And was not the position well taken, and is not the work still necessary? What is to become of the unity and science of this department of medicine if we are to abandon the pharmacopœia and take up with remedies presented in this wise? Of what use to review our list of *materia medica*, and revise our preparations decennially by the aid of the best talent in the land, if we are to push them aside and substitute the trash presented by these proprietary pharmaceutists? Shall we abolish the chair of Therapeutics in our colleges, and close the books relating thereto in our libraries, and learn what medicines to give, and for what to give them, from State Assayers, analytic chemists and special medicine manufacturers? All this will we come to if something is not done to turn aside the tendencies of the present day. The tribe of nostrum makers having filled the credulity of the public to saturation, and drained the purses of their victims to depletion, now seek to carry on their nefarious money-mongering through the agency of the medical profession. And shall we sit quietly by and see the careless and thoughtless of our guild become, unconsciously, the aiders and abettors of these bad men in their efforts to supersede the known, and true, and reliable among remedies, by the unknown, the false, and the unworthy, solely for their pecuniary aggrandizement? Nay, verily! but, on the contrary, let us at all suitable times, and in all proper places, lift

our warning voices that the unsuspecting may be armed against the machinations of these imposters; let us raise the hue and cry that shall drive them from the sight and knowledge of all good men.

Have I not, Mr. Editor, adduced sufficient testimony to establish that "the tendency of such expressions of opinion," as contained in my resolution, is not "injudicious," and that it is quite time for us to review our situation and see whither we are tending. Do you say that the presentation of such an array of quack advertisements and false pretenses is no evidence that physicians are being led away from the use of known and approved remedies, prepared by reputable manufacturers, or that they are likely to be beguiled into the prescribing of these special and spurious preparations? I take it as proof positive of dereliction in this behalf, that the spending of so much money in advertising these nostrums, and soliciting for them through expensive agents, is incontrovertible evidence that the proprietors are making it pay; and there is no way for them to make money except by the countenance of physicians, and physicians can only aid them by prescribing their medicines. Logically, then, we arrive at the conclusion that physicians are largely in the habit of using these medicines; and that this is true, is a matter of direct knowledge to all who have chosen to make the necessary investigation. And surely there can not be two opinions as to whether such "habit is unscientific and imprudent, tending to demoralize the therapist and to encourage irregular pharmacists and nostrum makers, and should be abandoned."

JAMES F. HIBBERD.

RICHMOND, INDIANA, February, 1868.

EDITOR LANCET AND OBSERVER:—I have had in contemplation some time a communication for the *Lancet*, and I will endeavor to put it into substance and form at an early day. But my principal object in now addressing you is to protest against the use that is being made of lectures on "specialties." I am unable to see why a third-rate, starving practitioner, preaching a little, and practicing a little, and whining a great deal, should be suddenly elevated to the stars, after hearing "twelve lectures" in an Eastern city, a matter that would just occupy two days' time in any well-regulated medical college.

I have heard of one of these smooth-going gentlemen, who exhibits his "certificate" from a gentleman who gives "private lectures" on a "specialty" in the "hub." I have no objection to the gentleman or his lectures, but I have an objection to the all-sufficient power of the aforesaid "certificate" of having attended *twelve* lectures, to do the following things:

1st. To dispense with the rule in medical etiquette that requires a regular practitioner to seek out and become acquainted with his regular brethren, and exhibit to them, in some way, his qualifications when he comes among them for the first time.

2d. I object to the assumption that such a "certificate" will justify its holder in visiting under the semblance of friendly calls, with his deluded victims, the patients of other medical gentlemen, or will excuse its happy possessor for insinuating his opinions about the health of valetudinarians, well known to be under the advise and control of gentlemen in all respects equal to the emergency, and who would be very loth to exchange intelligences with the "certificate"-holder and "certificate"-giver combined.

3d. I deny the efficacy of a "certificate" of attention to lectures of a surgical character, which embody topics that can be well learned in *two days'* time, in preparing its thrice-blessed holder to not only contend with certain surgical diseases, but also to cure *all* diseases incident to the female sex, and the male sex also.

4th. I most emphatically denounce the assumption that the certificate of attendance on *TWELVE whole lectures*, albeit delivered in Boston itself (to go to Boston renders it a matter of no consequence to a good many men, whether they go to heaven or not) will justify the man who opened his ears to them, at an expense of fifty dollars, in promising to cure everything that comes in his way, whether incurable or not.

I want to say, that when a woman breaks down her health, as many do, by the habit of procuring abortions, and worse still, by preventing conception, she may consider that the avenging hand of Almighty God is on her, and she can never get well. She may be relieved and her anguish may be assuaged, and, when possible, it should be done, but she can never be the woman she would have been had she not violated the laws of God and nature. This much I say, the "certificate"-giver and the "certificate"-holder, to the contrary notwithstanding.

They may pretend at the "Hub" that they can teach you—for

fifty dollars—how to build up God Almighty's work, as good or better than ever after you have been at pains to tear it down; but it is a false pretense, although backed by a "certificate." I am constrained to say, that this thing of curing diseases that are incurable is a humbug. It is like hawking liniments throughout the infernal regions to cure burns. It is a fraud, it can not be done, even by virtue of a "certificate."

Nor does the possession of a "certificate" of attendance on medical instruction that ought to occupy two whole days, prove any balm to those who, though curable, yet remain uncured. Still less can the "certificate" benefit those who courageously swallow corrosive sublimate and dog button, to cure maladies that exist only in a silly fancy.

This specialty has been extensively and (through the notice of a small essay or two) gratuitously advertised in the medical journals. It was a mistake to do so. If there is anything new, anything that ought to be added to science, that does not appear in the books, publish it. Let the world have the benefit of it at a fair price. Give it to men who are capable of using the facts to advantage rather than through mercenary motives. Confine it to a few third-rate mental hermaphrodites (with an occasional good man), as a stock in trade to ply the quack, and disgrace and discount whatever may be meritorious in the specialty and its teacher themselves.

Yours truly,

W.

Editor's Table.

Commencement Exercises of Miami Medical College.

THIS school terminated its Eighth Annual Session on the evening of the 20th of February. The exercises were conducted in the large lecture room of the College on Twelfth Street. The degree of Doctor of Medicine was conferred on twenty-eight gentlemen before a large audience, by the Right Rev. C. P. McIlvaine, President of the Board of Trustees. Prof. Chapman delivered the valedictory address to the graduating class. The address was well-written, and abounded in excellent advice.

This school has a successful future before it, if harmony, enthusiasm and hard work on the part of its Faculty will secure it. The class of the last session numbered one hundred and thirty students.

The following are the names of the graduates:

Graduates.	Residence.	Thesis.
Wm. S. Allen.....	Indiana.....	Acute Pleuritis.
J. H. Bennett.	Indiana.....	The Sick Room.
E. E. Barnett.....	Indiana.....	Fracture of the Femur.
S. D. Coffin.....	Indiana	Plural Births.
James P. Crow	Missouri.....	Intermittent Fever.
John S. Duckwall...O	Ohio	Erysipelas.
Allen Devilbiss.....	Indiana.....	Phthisis.
Jerome W. Flanders.	Indiana.....	Food and Digestion.
Fred'k Gundrum....	Indiana.....	Pneumonitis.
J. W. Hannan.....	Indiana	The Medical Man.
W. H. Huston.....	Ohio	Wounds.
J. S. Henry.....	Ohio	
Rich'd N. Hawkins..	Alabama.....	Acute Pleuritis.
M. B. Kellar.....	Kentucky.....	Delirium Tremens.
W. M. Kerr.....	Ohio	Pneumonia.
E. D. Laughlin.....	Indiana.....	Cerebro Spinal Meningitis.
John Labarre.....	Ohio	Camphor as a Stimulant.
Geo. H. Morrow....	Alabama.....	Acute Pneumonitis.
L. Roush	West Virginia.	Dyspepsia.
W. F. Smith.....	Ohio	Strabismus.
J. R. Skidmore.....	Ohio	Spotted Fever.
A. G. Sellard's.....	Ohio	Pericarditis.
Lewis Shepherd....	Indiana.....	Intermittent Fever.
Geo. W. Simpson....	Ohio	Hygiene.
S. R. Voorhees.....	Ohio	Inflammation.
R. D. Willan.....	Indiana.....	Gunshot Wounds.
W. D. Wheeler.....	Illinois.	Management of Children.
John H. Walker....	Missouri.....	Management of Natural Labor.
J. M. Waddick.....	Ohio	Study and Practice of Medicine.

CINCINNATI ACADEMY OF MEDICINE.—The President has divided up the Academy into the following Committees for work and reports :

Practical Medicine—Drs. White, John Davis, C. Woodward, W. B. Davis, Thornton, H. Smith, Rosenfield, Walker, Ludlow, Sexton, Morgan, Lawson, Graham, Murphy, Palmer, Hetlich.

Anatomy and Surgery—Drs. Dawson, Muscroft, B. F. Miller, Gillane, Sanders, Foote, Blackman, Mussey, Young, Thos. Wood, Gobrecht, Taliaferro, E. Williams, Schmidt, Ed. Rives, Bramble, Seely.

Materia Medica, Therapeutics and Chemistry—Drs. Conner, Graff, Peale, Stevens, Patterson, Vaughan, Bruning, H. M. Johnson, J. E. Webb, Parker, J. L. Green, W. R. Woodward.

Obstetrics and Diseases of Women and Children—Drs. Tate, Norton, Quinn, E. H. Johnson, Mendenhall, Richardson, Doherty, Fishburn, C. Milier, Gerwe, Dodge, Holtze, Mossecuier.

Pathology, Morbid Anatomy, General Anatomy, Physiology and Microscopy—Drs. W. Carson, Patton, Buckner, G. V. Jones, S. P. Bonder, Hiller, F. B. Mussey, Simpson, Bettman, Goode, Bartholow, Taylor, Comegys, Cassatt, Cartwright, A. D. Williams.

Medical Jurisprudence and Toxicology—Drs. Thacker, McIlvaine, Chapman, Miles, Siddell, J. T. Webb, Neelson, McReynolds, Tibballs.

Hygiene—Drs. Carroll, B. F. Stevenson, Brent, Clendenin, C. P. Judkins, A. M. Brown, Maley.

New Remedies and Pharmacy—Drs. Unzicker, Culbertson, Bettman, Hetlick, Ebetson, Vattier.

MEDICAL COLLEGE OF OHIO.—Owing to delay in getting to press, we are able to announce the commencement exercises and the names of the graduates of the Medical College of Ohio. The degree was conferred by the President of the Board, Flamen Ball, Esq. Prof. Connor delivered the valedictory to the class. The following are the names of the graduates:

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| James L. Brown, Ohio. | Matthias R. Mitchell, Ohio. |
| John S. Bryan, Kentucky. | James C. McMechan, Ohio. |
| Girard Bailey, Ohio. | Aaron Morris, Ohio. |
| William C. Cole, Indiana. | Alexander J. Montgomery, Ind. |
| George P. Carpenter, Ohio. | William J. Murray, Ohio. |
| John C. Cullen, Indiana. | John J. Meddicott, Ohio. |
| John L. Cleveland, Kentucky. | James P. Mooklar, Kentucky. |
| Wm. Judkins Conklin, Ohio. | William E. Meyers, Ohio. |
| Seth H. Cook, Ohio. | Albertus W. Ridenour, Ohio. |
| Anderson N. Ellis, Ohio. | McHenry Raymond, Kentucky. |
| Adolphus B. Frame, Ohio. | Alfred S. Remy, Indiana. |
| John Augustus Francis, Ohio. | Dock Wm. Richardson, Ohio. |
| Hiram C. Fisher, Indiana. | Adolphus C. Speck, Indiana. |
| Edward P. Gould, Ohio. | William P. Spurgeon, Ohio. |
| Bryant Grafton, Illinois. | William J. Srofe, Ohio. |
| John A. Gunn, Mississippi. | David A. Thompson, Indiana. |
| Charles B. Golden, West Va. | John Bell Thompson, Kentucky. |
| Madison Hammet, Ohio. | Robert H. Thornton, Kentucky. |
| William E. Henry, Ohio. | John H. Van Eman, Ohio. |
| Safford R. Hamer, Ohio. | George W. T. J. White, Indiana. |
| Leroy S. Holecomb, Ohio. | Charles Edw'd Wright, Indiana. |

William S. Hougland, Indiana.	Richard I. Watts, Illinois.
Robert A. Jamieson, Indiana.	James F. Wallace, Indiana.
Samuel Jepson, Ohio.	George W. Zimmerman, Indiana.
John F. Kennedy, Ohio.	N. Noble Vance, Indiana.
Thomas H. Lane, Indiana.	Joseph D. Larimore, Indiana.
Arthur W. T. Lyle, Ohio.	William G. Lawder, Ohio.

EYE AND EAR CLINIC.—Among the many clinical advantages now presented in this city to the students, we can not omit to mention the Eye and Ear Clinic of Prof. E. Williams, and his nephew, Dr. A. D. Williams. Their private reception rooms had become so crowded with patients that they were seriously incommoded in their operations and ophthalmoscopic examinations. To relieve themselves, they opened some months since a public clinic for charity patients, in a large building on Elm Street, overlooking Washington Park, and quite within a stone's throw of the Commercial Hospital. In addition to ample room for the public clinic, the house affords sufficient accommodation for a dozen or more private patients. On six days in the week, from twelve until two P. M., the Drs. Williams prescribe for and operate on a large number of cases of diseased eyes and ears. A formal clinical lecture is delivered, and practical observations made on all cases. The clinic has been attended by a respectable class during the winter. We need say nothing commendatory of this clinic, as the eminent position of the gentlemen in their specialty is a sufficient guaranty of its practical importance to the student.

THE SUMMER SCHOOL.—The Course of Lectures advertised in our last number, to be delivered in the Miami Medical College, deserve the attention of students. We hold that every student will profit much more by studying in a large city. The Course will not interfere with the Clinical Lectures to be delivered at the Commercial Hospital by the staff of that institution. Ample material for dissection will be provided. The hospital affords a great number of Medical and Surgical cases. In addition to this students will have the benefit of attendance on the Eye Clinic of Prof. Williams, which has grown to be very large. We advise, by all means, that all students desirous of profitable study and careful observation at the bedside, should attend this Course.

THE chief editor, Dr. E. B. Stevens, has been confined to his room for the last four weeks with typhoid fever. We are happy to announce, however, that he is rapidly convalescing. Any imperfections in the make-up and appearance of the *Lancet* must therefore be pardoned by its readers.

AT the annual election of officers of the Academy of Medicine of this city, held on the 2d of March, the following gentlemen were elected to their respective offices: *

President, Dr. John Davis.

First Vice-President, Dr. A. Rosenfeld.

Second Vice-President, Dr. J. P. Walker.

Recording Secretary, Dr. — Neilson.

Corresponding Secretary, Dr. John A. Murphy.

Treasurer, Dr. J. S. Unzicker.

Librarian, Dr. W. B. Davis.

AT the commencement of the University of Nashville, held February 26th, the degree of Doctor of Medicine was conferred on Eighty-five graduates.

THE degree of Doctor of Medicine was conferred on one hundred graduates of Rush Medical College, at its late commencement.

IODINE AND CARBOLIC ACID.—The *Journal des Connaissances Médicales* publishes a letter addressed to Dr. Caffee on Dr. Percy Boulton's late discovery of the action of carbolic acid on iodine: "The inconvenience," says the writer, "attending the external application of iodine and its preparations is so serious that physicians are often compelled to abandon a remedy the therapeutic efficacy of which is undoubted, nay, almost unequaled in *materia medica*. The great objection to the external use of this remedy is, that it leaves marks both on the linen and on the skin. This is a sufficient motive for seeking some means of getting rid of this drawback, especially in the case of ladies. Dr. Percy Boulton's method consists in adding a few drops of phenic (carbolic) acid to the iodine solution to be employed. This addition renders

iodine perfectly colorless, so that it may be applied with impunity. But this combination has another advantage. It appears from that practitioner's observations, which I can affirm, that, so administered, carbolate of iodine, which is the new substance in question, is not only one of the most powerful antiseptics we possess, but is intrinsically a more efficacious agent than iodine alone. I have used this compound under the form of injections, gargles, and lotions, in all cases in which iodine is prescribed. In sore throat, ozæna, abscess in the ear, etc., this preparation is a sovereign remedy; since, besides its disinfecting qualities, it modifies the mucous membrane, causes all local sensibility to disappear, and cures the patient much sooner than if either of the two agents were employed separately. The formula I employ is as follows: Compound Tincture of Iodine, three grammes; Pure Liquid Carbolic Acid, six drops; Glycerin, thirty grammes; Distilled Water, one hundred and fifty grammes.—*Sci. American.*

THOMAS PRIDGIN TEALE, F. R. S.—From an obituary in the London *Lancet*, we learn of the death of Mr. Teale (of Leeds), at the age of sixty-seven, on the last day of the old year. Mr. Teale was perhaps best known in this country through the operation which bears his name; the method of amputation by a long and short rectangular flap. He was one of the founders of the Leeds School of Medicine, where he lectured for upward of twenty-five years, chiefly on anatomy and physiology, and for thirty-one years was surgeon to the Leeds General Infirmary. In 1858 he was called to a seat in the Medical Council as one of the six nominees of the Crown, and in August last received the degree of Doctor of Medicine, *honoris causa*, from the University of Dublin.

DARTMOUTH (N. H.) MEDICAL SCHOOL.—Dr. Dixi Crosby, LL. D., who succeeded the late Dr. Mussey in the Professorship of Surgery in Dartmouth Medical School, in 1838, proposes to retire from active connection with the school next year. He will then have completed his thirtieth course of lectures. Dr. Crosby is the only member of the Medical Faculty of 1838 now retaining position in the institution. Dr. Oliver W. Holmes was then Professor of Anatomy and Physiology, and the Hon. Joel Parker, LL. D., of Medical Jurisprudence.

WE find the following pen picture of Dr. Stokes, in a letter by Dr. Yandell, Jr., of Louisville, to the *Richmond Medical Journal*:

"From the reputation Dr. Stokes has long enjoyed in our country, you are prepared to hear that he is now a man far advanced in years, though hale still and capable of much profitable labor. He is somewhat under six feet in height, with broad shoulders, much stooped, large, majestic head, fringed with thin iron-gray hair, very long and curling, but nearly bald on top. The expression of his face is very benevolent, and you are gratified to remark in its lineaments the impress of goodness as well as greatness. His features are heavy and not handsome. He is singularly abstracted in manner, and gives you the impression that he is profoundly absorbed in thought. In fact, as you gaze upon his calm, thoughtful face, the idea occurs to you that it is only the tenement of clay you are beholding, and you wonder where is now the great mind that animates it, and in what work engaged. Dr. Stokes is Regius Professor of Physic in the University of Dublin."

PARIS HOSPITALS.—*Treatment of Rheumatism.*—In the hospitals the effects of the re-entree are experienced, not so much so by the students as by the more (or less) happy patients, who return to the hands of the chefs de service, returned from the vacations with their strength and their theories renewed like giants. In M. Bouillaud's service, for example, the lancet has lain quiet for two months, and rheumatisms have succumbed to sixty-grain doses of sulphate of quinine, and pneumonia to tartar emetic, as incontinently as if bleeding had never been invented. But the provisory chef has finished his term of office, M. Bouillaud, stethoscope in hand, resumes in La Charite the daily business of fifty years, and, presto! everything is changed. Day before yesterday, there entered the ward a young man attacked with acute articular rheumatism. He was bled three palettes (300 grammes) the evening of his arrival, and the next morning the pulse, which had been 100, had mounted to 120. The sounds of the heart had begun to assume that peculiar metallic timber characteristic of nervous or anaemic patients. The pain was not in the least relieved, but the patient declared that his head felt much freer than before the bleeding. On the second morning, the bleeding to three palettes was renewed, and on application of scarified cups ordered around the base of the thorax. This latter procedure was more especially directed against the possibility of endo-carditis. M. Bouillaud admitted that there was but the rudiment of a souffle at the pericardium, but that these minimum proportions were due to the preservative influence of the first bleeding, and further spoliation was required to warn of the threatened danger.

You know that to M. Bouillaud belongs the honor of the discovery of the endo-carditis, and of its connection with articular

rheumatism. It constitutes, therefore, his *bete noir*, and since, in every case of rheumatism, he foresees the possibility of a complication that may determine an incurable and ultimately fatal heart disease, he deems himself called upon to act with heroic energy.

I confess, the theory of the treatment seems to me, particularly in this case, unreasonable, from the fact that since bleeding increases the proportion of fibrine in the blood, the danger of thickening of the valves of the heart by fibrinous deposit should be increased. As to the practical result, I shall be better informed when I have observed the treatment in M. Bouillaud's wards during several months.

The only case of rheumatism that I have seen treated by bleeding, before entering the wards of M. Bouillaud, occurred in the service of Moutard Martin, of Beaujon. This physician habitually pursues the quinine treatment. In the case in question, however, although the inflammation was mainly concentrated at one knee, the effusion abundant, the joint pale and but moderately painful, so that the local symptoms indicated a subacute form of the disease, the pulse was 112, the skin hot, and the general aspect rather that of the acute form, and threatening the heart. The patient was bled twice, to three palettes; but the pulse remained exactly at 112 for an entire week, and the local affection seemed to pursue its course with very little regard to the treatment.

The quinine treatment was invented by Briquet, a physician of La Charite, well known for his work on hysteria. Wishing to experiment on the action of sulphate of quinine, he administered it to all the patients in his service, among others the rheumatical patients. These latter unexpectedly recovered. Upon this hint the experiment was pursued further in this direction, and the valuable influence of sulphate of quinine over rheumatic fever has been unquestionably demonstrated. Briquet gives it in five-gramme doses (about one hundred grains), taken in divided paquets throughout the day. M. Ball, who supplied M. Bouillaud's place during the vacation, treated his patients to three-gramme doses (sixty grains). But at Lariboissiere and Beaujon, MM. Herard and Moutard Martin commence with seventy-five centigrammes, and gradually increase to two grammes—never passing this dose.

It is this latter method that I have had an opportunity of observing on the most extensive scale, and the results are certainly satisfactory. The most favorable cases for treatment are those in which the inflammation is the most generalized and the fever most acute, in these the pain and fever were notably ameliorated the third or fourth day. The pain was never relieved before the fever, though the latter sometimes fell while the pain persisted, though more moderately. Almost always, where this persistence was marked and the disappearance of the fever complete, the disease tended to assume a chronic form, over which the quinine had very little control.

In the few cases that I saw treated by five-gramme doses, the amelioration was generally marked by the second day. In one of these, however, a regular chronic rheumatism developed in the hands, which assumed the deformation characteristic of nodulous rheumatism. In another, the treatment was at first entirely ineffectual, was suspended and another substituted, which also brought no relief. The quinine was resumed, and the fever immediately broken.

With this high dose of the sulphate, the treatment was persisted in five or six days. The more moderate treatment was persisted in during seven or eight. Interruption of the treatment earlier than this was usually followed by a relapse of the disease.

Monarticular rheumatism was extremely obstinate, and in no case have I seen it yield to the quinine treatment. Several cases occurred in which the inflammation was confined to one foot, which became œdematosus (the gouty rheumatism of English authors). In one of these cases, a blister finally conquered the inflammation, in another, the application of collodion was equally successful after the rheumatism had lasted two or three weeks, and resisted the quinine.

In one case of this rheumatism of the foot, the patient died, carried off by an endo-carditis, or, to speak more accurately, by the accumulation of fibrinous clots in the heart, which could be partly attributed to inflammation of its lining membrane, partly to the general influence of rheumatism on the blood. The rare opportunity was thus afforded of examining the tibiotarsal articulation that had been the seat of the rheumatism. About a tea-spoonful of clear yellow serosity was found in the articulation. The synovial was not thickened, but in three points appeared a spot of redness, indicating the congestion that had not altogether subsided. The material reality of the lesion in rheumatism received, therefore, another confirmation.

The theory of the action of sulphate of quinine is based upon its influence on the nervous system. It is supposed to shock the nerves, as in the case of intermittent fever, and by stimulating them, arrest the process of disassimilation which proceeds, perhaps, with such rapidity, because the usual influx of nervous force has been withdrawn.—*Paris Letter Richmond Medical Journal.*

DODGEVILLE, IOWA, February 18, 1868.

NOTICE.—I wish to sell my property in this place to some physician who wishes to practice medicine. It is in a small village, surrounded with a good country and settled up thick with wealthy farmers. The practice will pay from *fifteen hundred to three thousand dollars* per year. Any one wishing a location of this kind will address Dr. B. F. H., Dodgeville, Iowa, who will promptly answer all communications.

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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Original Communications.

ART. I.—*Herniotomy.—Five Successful Cases.*

By W. H. MUSSEY, M. D., Professor Operative Surgery, etc., Miami Medical College and Surgeon to Commercial Hospital.

FIRST CASE.—Wm. E——, mulatto; plasterer; aged forty years; has suffered from inguinal hernia of right side for several years.

January 4th, 1860, I was called by Dr. C. P. Brent to assist in reducing strangulation. All means to reduce by taxis failing, herniotomy was performed, the sac was freely opened, a quantity of bowel of a dark chocolate color was found. I drew down the intestine to observe if any adhesion existed at or near the seat of stricture, and then reduced the hernia.

The condition of the patient for four weeks was critical, but he finally recovered. One day, during his convalescence, he got up from the bed, and being very feeble, fell prostrate upon the floor; as there was no pad on at the time, a large mass of bowels protruded through the canal into the scrotum, distending the integument and thinning the cicatrice. The hernia was returned without difficulty, but the tissues never perfectly consolidated, and trusses were necessary to support the abdominal walls.

SECOND CASE.—Wm. E——. The same patient was standing at the gate of his house on the morning of November 10, 1867, when he suddenly became aware that his hernia could not be returned, and at once called in Dr. D. Bramble, who sent for me. On arriving I recognized my former patient. I learned that Dr

Brent had reduced slight strangulations several times since the previous operation, and one of a serious character. The cause of the present descent of the hernia was the inadequacy of the truss; the spring was rusty and eaten through, and had no force whatever.

Efforts to reduce by taxis were made by ordinary means, by placing the patient on his knees and breast, and by manipulating for fifteen minutes, with the patient chloroformed, all without success. Herniotomy was resorted to—the sac was opened revealing chocolate colored intestine one foot in length. A large amount of serum flowed out of the sac when opened. The intestine was drawn down after the division of the stricture, and then returned. Attached to the sac was a loop of fibro-cellular substance, six inches in length, resembling intestine consolidated and reduced in size; the precise character could not be determined. The sac could not be returned, it was placed so as to close the ring and stitched up. One ounce of chloroform was used. The convalescence was slow, eight weeks elapsed before the patient was out.

CASE THIRD.—John Arnold; aged twenty-eight; teamster. At six o'clock on the morning of November 22, 1867, on jumping down from a fence he had scaled, a hernia of right inguinal region, (supposed to have been cured by wearing a truss for six years, from the age of twelve,) came down and was strangulated; professional assistance was called, but the strangulation was not relieved. Chloroform was administered at eleven A. M., and taxis employed unsuccessfully. At three P. M., in a consultation, I employed taxis again, the part having been covered with ice during the interval. Herniotomy was performed at four, the sac opened, and the stricture divided. The mass of intestine was voluminous and of a mahogany color. On drawing down the intestine a puncture was observed in the bowel one-sixth inch long; this had occurred at the seat of stricture. A couple of stitches were taken in it and cut off close, and the bowel returned. The case had a rapid convalescence, and there was no trouble from the puncture; bowels moved on the tenth day.

CASE FOURTH.—*Femoral Hernia.* Mrs. K——, aged seventy-five years. Emaciated and in feeble health.

November 26th, 1867, noticed pain in a small tumor in the right femoral region, which had existed she knew not how long. Called Dr. A. T. Keyte but would not submit to an examination. The trouble increased, and on the twenty-eighth Dr. Keyte was

permitted to make examination. I saw the case with him at 9 P. M., and found a tumor as large as an extra-sized hen's egg, painful to pressure and elastic. Taxis reduced it to one-third its size. There had been nausea and vomiting of tea and fluids taken, but of nothing else. Ice was ordered to be kept upon the tumor. In the morning the tumor had resumed its proportions, but there was no stercoraceous vomiting; later in the day this took place.

At 7 P. M. vomiting occurred occasionally; tumor not diminished, and on taxis can be reduced to one-half its size; pulse one hundred and twenty per minute and feeble.

Herniotomy was decided upon; $\frac{5}{j}$ of whisky was given. Sulphuric Ether was administered, under its influence the pulse improved in force and fullness. The sac was firmly adherent to tissue covering it, and the bowel was firmly adhered to the sac in all its walls. Two inches of the bowel was down of the darkest possible hue, with an exudation of half organized coagulum upon the fundus of the tumor it formed. The adhesions were separated so that the bowel could be drawn down. It was then returned and the wound dressed. Patient waked easily and then slept for a time. At midnight one-eighth gr. of morphine every three hours was given.

Nov. 20, 8 A. M. Pulse one hundred and twelve and full; has passed a comfortable night.

6 $\frac{1}{2}$ P. M. Pulse one hundred; patient comfortable; has taken beef tea.

Dec. 1, 8 A. M. Pulse one hundred; subsequent to this the condition varried but little as a gradual convalescence resulted. The bowels were moved spontaneously on the seventh day, and every day thereafter.

CASE FIFTH.—*Femoral Hernia.* Mrs. L—— D——; aged fifty-seven years; widow; mother of ten children; has had hernia of right side for five years; was strangulated two years since, and it was reduced; has not worn a truss. January 10th, 1868, at evening, the bowel came down and could not be reduced. 11th, called Dr. Hoeltge who ordered ice applied. Dr. H. called me January 12. Taxis, whilst the patient was in the anaesthetic state, was unsuccessful. Herniotomy followed; the sac was opened; a small knuckle of bowel was grasped at the seat of the stricture; after division hernia was reduced.

7 P. M. Pulse one hundred and twenty.
13th, 8 A. M. Has slept well.

1 P. M. Pulse one hundred and twelve.

Ordered 1 gr. Opium every three hours.

The convalescence was quiet and satisfactory.

The practical point I desire to dwell upon is the importance of opening the sac. In the fifth case this might have been dispensed with had we *known* the small amount of intestine involved. In all the other cases there is little doubt fatal results would have followed had reduction *en masse* been practiced. In my first case of herniotomy I reduced without the section of the sac, and the patient died with symptoms of strangulation unrelieved. No autopsy was allowed, but I determined not to do so again, and have since invariably opened the sac.

ART. II.—*Stone in the Bladder.*

W. S. BAKER; occupation a wagon maker; aged thirty-three; general health has been good until recently.

January 24th. Application was made to me for treatment. I instituted an examination [and found him to be suffering from *partial* retention of urine. Occasionally he would suffer a great amount of pain located near the neck of the *bladder*. At other times he would realize but a slight degree of pain, and could urinate with comparative ease. I placed him on the anodyne and diuretic treatment.

Jan. 25th. He felt much better; continued treatment.

Jan. 26th. While urinating he, with great difficulty, passed a *calcareous deposit* weighing grs. xix. Its measurement is as follows:

Circumference one and one-quarter inches; length three quarters of an inch. It is *ovoid* in shape and presents a rough surface. It is very hard, and resembles the common lime rock found in all parts of the country.

I present this statement in order to show the dilating powers of the *urethra*, and by so doing afford a passage for so large, a substance unaided by instruments.

In conclusion I would say that every physician who has seen this stone, claims it to be the largest they have ever seen.

Very Respectfully,

A. B. BARNES, M. D.

JANESPORT, Mo., February 11, 1868.

ART. III.—*Diphtheria.*—What is really to be Understood by this Term.

Read before the Academy of Medicine, of Cincinnati, by JOHN DAVIS, M. D., Member of the Medical Staff of the Commercial Hospital of Cincinnati.

IN a former article on the subject of Diphtheria, which I read before this Academy in 1863, I only went so far as to give a summary of the views of Bretonneau on this topic. In now resuming the effort to show what is really to be understood by the term Diphtheria, it will be necessary first to examine Bretonneau's positions in detail. He it was who introduced the term into use, and the part of his definition of Diphtheria, the essential part, the statement of the class of diseases to be included in it, has been generally accepted. To facilitate the examination I shall present a brief recapitulation of his propositions. They are as follows, viz.:

1st. That Diphtheria is a proper generic term for all forms of epidemic sore throat, and that *malignant gangrenous Angina* and *croup* are to be included under this head. In other words he substitutes the word *Diphtheria* for the term *Angina*, so far as to include under the head of *Diphtheria* the whole genus of epidemic diseases of the throat.

His second postulate is, that in every case of Diphtheria a membranous exudation is present, its seat being in the fauces, in the pharynx, in the mouth, in the nares or somewhere in the air-tubes.

His third claim is, that the characteristic exudation of Diphtheria is, anatomically, *sui generis*; by this being meant that it is not capable of being induced by any other influence than the presence of diphtheria.

His fourth point is, that *pathologically* the exudation is a concrete specific poison, just as is that of primary syphilis, and that the virus is capable of propagation only by the application of a portion of the pellicle from an affected to a sound part, or from one person to another; that it is never communicated "by volatile invisible emanations, susceptible of being dissolved in the air, and of acting at a great distance from their point of origin."

5th. That ulceration is never present in this disease; that the surface under the false membrane may be reddened or tumified, but that there is never any loss of tissue.

6th. In his "Treatise on Diphtheria," his first work on this subject he described this affection as always strictly local. "Children" he says, "affected with this disease will play and retain

their habitual appetite, mortality being caused only by mechanical obstruction to respiration, consequent upon the accumulation of the membranous exudation." But in his subsequent "*Memoirs*" upon this disease, he admitted that in some cases there is present a "*toxæmia*" to which the depressing effects of diphtheria are attributable. But this poisoning of the blood he regarded as only the effect of the local virus.

Bretonneau was an honest and careful observer, and it is not to be doubted that the cases of epidemic sore throat, which he treated at Tours, were generally attended with the presence of false membrane. In many of his patients it was easy to see this exudation from the first of the attack; but in others it was only discoverable when death gave him an opportunity of using the scalpel. In such cases as got well without there having been any discoverable exudation, he had no hesitation in concluding that they also were Diphtheric cases; and that if they had died he would have been able to prove the presence of deciduous deposit. Those who insist on regarding no case as Diphtheric that does not present a patch of false membrane manifest to the eye, during the life of the patient, and consider themselves as followers of Bretonneau, are in error as to what this writer taught. Their position is precisely that of the men who contended with him in his day. They were the physicians practicing in his neighborhood; and they said, "in the Anginous affection which we find prevailing, and to which you refer in your publications, we do not find any deposit of false membrane." To settle this question, Bretouneau, with his pupil, Velpeau, took up the bodies of the patients of those physicians to the number of thirty-six, and discovered an exuded patch in every instance.

Under the head of "A History of Diphtheria," he cites accounts from a number of early writers, of epidemics of Anginous affections which they had observed. In some of them the presence of an adventitious deposit is mentioned, and in others it is not. But as he applied the term Diphtheria to cover all cases of epidemic disease of the air-passages, the fact of the cases being of epidemic origin, he considered as sufficient to prove that they were cases of Diphtheria. He, indeed, went farther; even so far as to pronounce cases of sore throat, where there was no evidence of an epidemic origin, to have been cases of Diphtheria. General Washington's case is an instance. Bretonneau believes that he died of Diphtheria; but the able physicians who attended Wash-

ington in his last illness considered his case as one of laryngitis. And there does not appear any evidence that affections of the air passages were prevalent in the vicinity at the time.

But such an enthusiast as he was is always in danger of forming hasty conclusions. Velpeau related of him that he was so much of an absorbed man, that when engaged in the study of typhoid fever and Diphtheria, if any one spoke to him on any other subject he would give no heed. If the door-bell rang, he would say to Velpeau, go my friend, and if it is a case of fever or sore throat, say "I am in and will attend immediately," if otherwise, say "I am not at home." The same authority also states that when engaged in the examination of any subject, he gave it his undivided attention, regardless often even of his need of food and sleep.

As to his having substituted the term Diphtheria, or *Diphtheritis* as he had it, for the term *Angina*, the result has been to mislead many into supposing that Diphtheria is something else than mere epidemic sore throat, and that its first appearance to the present generation is of very recent date. The *London Lancet Sanitary Commission* on Diphtheria were misled by his writings: as is shown by their publication in that journal in March, 1859. They then reported that they observed "a sudden development of a strange type of disease, the propagation of another organic poison, as active, as deadly, but more mysterious than that of typhus or cholera." And in the same report they say "it is a disease, till lately, unknown to the practitioners of this country, and not formally described by any of the older writers." And they say, "though the disease is new to the moderns, it seems to have invaded various parts of the world at long intervals of time."

This part of their report they base on Bretonneau's history of Diphtheria, in which he expresses the belief "that it may be traced to an epoch earlier than that of Hippocrates, and nearer to that of Homer, and that it was then known as the terrible *malum Egyptiacum*.

The misapprehension of supposing that Diphtheria is a new disease to the moderns, or that it is so regarded by Bretonneau, is strange when we call to mind that epidemic throat diseases, malignant gangrenous angina and croup, have been always known to the moderns, and that these form the very conditions which Bretonneau regards as constituting the different forms of Diphtheria.

The mistake has arisen from two sources, one of which I have already mentioned, it being the fact of Bretonneau's having presented a new name for an old family of diseases. If a new term for rheumatic affections were presented by any person high in authority, I think it very probable that many would infer the presence of a new disease.

The other source from which I judge the mistake has in part originated, is from a too hasty reading of Bretonneau, or from the limited opportunities which merely English readers have had of knowing his views.

The only English translation in book form of any of his writings on this subject, is contained in a volume issued by the New Sydenham Society, in 1859, for its subscribers exclusively, entitled "Memoirs on Diphtheria from the writings of Bretonneau, Troussseau, Bouchut, Empis and Daviot." More than half of this volume is made up with translations from Bretonneau, which shows the esteem in which he is held by the New Sydenham Society as an authority on Diphtheria.

But though Bretonneau is not blamable for the mistake thus made, it would still be a subject of regret that he has substituted a new term for one that had been long accepted, and which, to say the least of it, is equally applicable to describe the affections included under it, were it not that the adoption of a new name has led us to study the subject of epidemic sore throats anew, and to the finding that importance is generally to be attached to the presence of an exuded pellicle wherever it may be found; and that not unfrequently soreness of the throat, even so slight as to escape the attention of the patient, may be accompanied with severe general disorder, the true nature of the case being only understood when the condition of the fauces has been examined.

Let us now pass to an examination of Bretonneau's postulates in regard to Diphtheria in regular order.

As to his first, that *Diphtheria* is a proper generic term for all the forms of epidemic sore throat; I have nothing to add to what I have already said. The name *Diphtheria* is now adopted for all this genus of affections. But to his claim that *croup* is to be included under this head I demur. He expresses the opinion that Queen Hortense, in 1809—10, was affected for months with gum Diphtheria, and that her first child died of laryngeal *Diphtheria*, which he holds to be *croup*.

In this connection it is proper to state that the name *croup* was

first introduced into medical literature by Dr. Home, of Edinburgh, in 1765, though it had been in popular use previously for a disease often fatal by asphyxia. He regarded it as a sthenic disease, conquerable only by leeches, bleeding and purgatives.

His views were adopted at once by the English, and soon after by many on the continent of Europe.

On the occurrence of the death of the first child of Louis Bonaparte and Queen Hortense, alluded to above, the first Napoleon called a concours of physicians to determine as to the disease which caused his death. This result was the article on croup in the "*Dictionnaire des Sciences Medicale*," written by M. Roger Collard. This article takes the views that croup is an acute inflammation, rapid in its progress and characterized by concrete exudation on the surface of the larynx, and that it chiefly attacks children under ten years of age. Also, that cold and moisture are its causes, and that it is neither infectious nor contagious.

Home's views, it is seen, were fully adopted by the concours. This was in the year 1812. Bretonneau published his main work on diphtheria in 1817, remarking in regard to the decision of the concours, "that it was strange that a work (Home's,) containing only a small number of isolated and inconsistent descriptions had effaced the traces of the ancient traditions, and had exercised for half a century so great an influence on medical practitioners."

The ancient traditions to which he refers are collected in his History of Diphtheria; and a most careful examination of it will fail to discover anything conflicting with Home's view of croup. His declaration about the tradition of the ancients is, therefore gratuitous. Cullen and Cheyne have described croup in accordance with Dr. Home's description, as being a sthenic disease, not produced by contagion or epidemic influence, and best treated by antiphlogistics. "What real identity," asks Cheyne, "can there be between two diseases, the one caused by cold, the other by contagion; the one always purely inflammatory, the other generally typhoid; the one requiring a decidedly antiphlogistic treatment, the other local stimulants of the most powerful kind, tonic medicines and cordials, bark and wine, according to the procedure of our fore-fathers."

Another objection to Bretonneau's claim, that *croup* is only a form of Diphtheria is found in what appears to be a fact, that in true croup the organic lesion is confined to the larynx, and no exuded patch is present in the fauces; and that the attack ter-

minates favorably or otherwise in a few hours. In laryngeal Diphtheria, however, (Bretonneau's Croup,) there is in most cases, perhaps in all, concrete exudation on the fauces or ulceration before the manifestations of the laryngeal trouble, and the attack lasts longer than that of true croup, often continuing for one or two weeks.

His second point that there is membraniform exudation in every case of epidemic throat disease; this is not proved by the history which he presents, nor has it been sustained by observations made since his day. That such an exudation was generally or even always attendant in the epidemic which visited his neighborhood, he appears to have amply proved by his individual observations. But he went too far when he inferred that, therefore, this kind of deposit is invariably present in every case of epidemic soreness of the throat.

As to his third point, that Diphtheric exudation is, *anatomically, sui generis*; that is, that it is never caused by any other presence than that of Diphtheria. I make the objection that a similar exudation sometimes attends scarletina, and that cases do occur of sore throat and a like exudation among persons taking care of scarlet fever patients, even among people who have been previously attacked with scarletina.

Concerning his fourth postulate, that the exudation is a concrete specific poison, just as is that of primary syphilis, and capable of propagation *only* in the same way, that is by a transference of a portion of the pellicle from an affected to a sound part, or from one person to another; that it is never communicated by "volatile invisible emanations, susceptible of being dissolved in the air, and of acting at a great distance from their point of origin;" this view in its totality has not had a defender from his day to this. That a transference of a portion of the pellicle from an affected to a sound part, or from one person to another may cause the disease, is believed; but not that this is the usual way by which Diphtheria is communicated, and far from this that such is the only way.

His fifth proposition, that ulceration is never present in Diphtheria, is not supported by the early history of epidemic sore throats nor by later observations. Bretonneau cites in corroboration of the correctness of his positions the statements of some early writers, among whom is Aretæus. This is in his "*History of Diphtheria*."

Aretæus described a disease, "in which the tonsils are covered

with a white humor which extends also over the tongue and gums." But he says "ulcers occur on the tonsils; some indeed, of an ordinary kind, but others of a pestilential and fatal kind." Artaeus says expressly that ulcers attended, and therefore he does not support Bretonneau on this point. Dr. De Fontechas, in 1611, describes an epidemic in Spain of what was called *morbus suffocans*, which he had observed from as far back as the year 1581, and in which there was swelling of the throat, accompanied with large whitish scabby ulcers, but in some cases only a white pellicle.

Dr. Herren, speaking of the same epidemic, says that some of the cases answered to common sore throat without exudation or ulceration; others had superficial ulceration, and some a spreading, sanious ulcer, or what was worse, an ulcer covered by a white or livid crust constituting a sloughing ulcer.

Some time afterward an epidemic prevailed in Sicily of a sore throat affection named the *Gulae Morbus*, in which a white or livid exudation extended over the fauces, and sometimes into the nares, often followed by mortification of the affected parts, the patient dying on the third day. The disease was contagious. Cortesius mentions that when one case presented in a house other members of the family were found likely to be affected. A monk suffering from this affection, observed that his breath had a foul odor, and requested a friend to smell it. In three or four days afterward, Cortesius saw that friend die from inflammation of the fauces.

The first notice of the disease in England was Dr. Fothergill's account of sore throat with ulcers, published in 1748. Other early accounts of the occurrence of ulceration in Diphtheria can be cited; but those already instanced are probably sufficient. I therefore now pass to a time nearer our own day.

M. Beequerel, in 1841, published an account of an epidemic then prevailing in Paris, of gangrenous sore throat, in which there was exudation of false membrane. The fauces were at first covered with an exudation, which soon separated from the mucous surface and left the appearance of an eschar, which was afterward cast off, leaving, in many cases, a deep ulceration which, in not a few instances, caused fatal hemorrhage. The general condition present before death was that which accompanies gangrene. The autopsies of fifteen cases showed *gangrene* of the tonsils in nine; and in the other six cases, gangrene of the pillars of the fauces or of the pharynx.

His sixth proposition, that Diphtheria is a strictly local disease, he himself found reason to change from its original form, so far as to admit that a *toxæmia* is sometimes present; but he maintained that this poisoning of the blood is the result of the presence of the local virus, and that even in these cases the disease was primarily local.

M. Trosseau, in the *Gazette des Hôpitaux*, 1855, states, "that the Diphtheritic disease, in innumerable instances, for the last seven or eight years, has killed at once by the constitutional affection without the participation of the larynx."

After referring to the enormous swelling of the lymphatic ganglia of the neck (the swelling in this form of Diphtheria being, he says, altogether disproportioned to the faecal difficulty,) he adds: "Join to this acute pain in the head, intense fever with excessive frequency of the pulse, and you have signs of the onset of the worst form of Diphtheria. Some hours later, false membrane is observed on the velum and uvula; also in the nares on the septum and on the turbinated bones. The patient is extremely agitated and does not sleep; the breathing is stertorous and snoring. After some thirty-six or forty-eight hours the features assume a livid pallor; delirium follows; and the patient dies with all the appearances of anaemia, in a state of somnulent tranquility, which strongly contrasts with the agitation that distinguishes the agony of croup."

M. Isambert describes an epidemic of Diphtheria which prevailed in Paris, in 1856, showing that a blood poisoning was the first difficulty and the most serious one throughout. In some of the cases there was exudation of patches, without ulceration, which proved fatal by the extension of the exudation into the larynx. In another form, which he termed "*Angina Diphtherica Maligna*," in which the membranous exudation, soon after its formation, assumed a dirty gray or blackish color, the uncovered mucous surface being livid. He says, "the adenitic swelling is enormous, and effects not only the glands but the cellular tissue, the skin often sloughing from excessive tension."

M. Isambert's description corresponds accurately with that given by M. Trosseau, but with the addition that in the cases he observed sloughs and ulcers, in some instances, occurred.

M. Parachaud's report of a similar epidemic in Boulogne, shows that there, also, *toxæmia* was the primary and the essential difficulty. This completes the examination of Bretonneau's teach-

ings on Diphtheria, and it leaves Bretonneau the merit; 1st. of having called *particular* attention to the frequent presence of adventitious membrane in some epidemics of anginous affections. 2d. That he called attention to the fact that epidemic throat affections are often contagious, a fact much lost sight of at the time he wrote. 3d. Of his having succeeded in establishing a new name for these diseases; that is of having succeeded in introducing into medical nomenclature, the word Diphtheria, as a generic term, applying to and including all forms of epidemic throat diseases. 4th. That by the inauguration of this new term he has done good, though indirectly, by causing us to study the whole subject of anginous diseases anew; this study leading to much increase of light on the nature of these maladies, and to our seeing more clearly the near relation, in essential character, which all the epidemic forms of throat affections bear to each other.

Therefore, while we disagree with him, on some of his conclusions regarding Diphtheria, we heartily accord; that his labors have promoted the advancement of medical science; that his life, having this result, was well spent; and that his name is to be held in honor.

*ART. IV.—Report of the Section on New Remedies and Pharmacy,
to the Academy of Medicine.*

BY J. S. UNZICKER, M. D., Chairman.

THE attention of the academy is especially directed to the subject of fluid extracts. With few preparations have the profession been more deceived than with these, and it would require but little attention on the part of the members to satisfy themselves on this point. Many so called fluid extracts are found to have not even the strength of tinctures. A specimen of fluid extract of senegæ, lately examined by the chairman of this committee, was actually of less value than a good decoction of that root. Why is this? This may be answered, is caused by a desire of large profits, carelessness or ignorance. You will hardly find one in thirty of the druggists generally, who understand percolation perfectly, nor do those care to seek the necessary information by

reading that excellent periodical, the "American Journal of Pharmacy," edited by that most able pharmacist and chemist, Wm. Procter, jr., of Philadelphia. We not only prescribe these worthless preparations unknowingly, to the injury of our patients, but at the risk of loosing our reputation besides. Then what is the remedy? It is that we insist that our prescriptions shall be put from articles of reliable and undoubted manufactory only. That we will not patronize any druggist who is unwilling to perfect himself in his profession, or who will not allow his apprentices to do so either.

A man who is not willing to study his profession and keep up with the times, as well as medical men have to do, can not be trusted, and by patronizing such we only encourage quackery in the worst form, to the detriment of our patients, ourselves and those good and honorable pharmacists, who are capable, conscientiously devoting themselves to their profession, and are constantly making researches, which ultimately results to our benefit. Why do we consider it quackery for a medical man to practice medicine without a diploma? Does not the same rule apply to the pharmacist likewise? With the same propriety might we consult with quacks directly, as to encourage quackery indirectly.

As it is the duty of your committee to keep you informed on these subjects, we will mention a few of the best and most noted manufacturers in this country. First and foremost stands E. R. Squibb, M. D., of Brooklyn, New York, about whose reputation as a chemist there is but one opinion, to wit: That his preparations are as near perfection as can be. He is considered "*the father of our data in improvement in the manufacture of fluid extracts by percolation without the use of heat,*" so destructive to most of their active principles. Samuel P. Duffield, Ph. D., of Detroit, Michigan, whose high reputation as a pharmacist is sufficient guarantee for all he makes. Tilden & Co., New York, well known since 1848. But as that firm makes two kinds of fluid extracts, which they ought not to do, it will be necessary to order those made according to the U. S. P. to get what we want. If we mistake not, to this house is due the credit of being among the first who made these extracts.

Commercial Hospital.

Diphtheria.

Service of DR. JOHN DAVIS.

CASE FIRST.—F. B——. Admitted to Medical Ward October 17, 1867; age seventeen years.

States that three weeks ago her throat became sore, and has continued so ever since. In other respects has enjoyed ordinary health. Is small, spare, swallow, a dark areola about the eyes, somewhat anaemic. Fauces are quite red; no exudation; some difficulty in swallowing; pulse ninety; moderate force; tongue clean; appetite good; bowels regular; uterine functions normal.

R.—Acid Carbolic, gtt xvj.

Potas. Chlorat., ʒ iij.

Syr. Simp., ʒ,

Aq. Bull, ʒ iiij.

M.—Ft. Sol. S. one-half tablespoonful every three hours.

Oct. 22d. Redness of fauces gradually diminishing; general condition remains about the same.

R.—Ferri. Citrat., ʒj.

Vin. Catawb., ʒ iij.

M.—S. ʒj ter in die.

The carbolic acid and chlorate of Potash being still to be given.

Oct. 23th. Redness of fauces and difficulty in swallowing have entirely disappeared; general condition improving.

Oct. 26th. Discharged.

CASE SECOND.—M. J. K——, aged twenty years. Admitted to Female Medical Ward September 28th, 1867.

Oct. 28. Since admission has been under treatment for intermittent fever, pneumonia and vaginitis. Still under local treatment for the last. Is of unhealthy appearance, tall, spare anaemic.

Yesterday had a chill followed by fever. This morning complains of sore throat. The fauces are quite red; a slight patch of exudation on left tonsil; pulse seventy-six; tongue clean; bowels regular; appetite good; has not menstruated for four

months. Is taking citrate of iron as above. In addition to have acid carbolic and potassae chloras as ordered in case first.

Nov. 1st. Redness of fauces, difficulty in swallowing and exudation disappearing.. Treatment continued.

Nov. 5th. Condition of throat and general condition improving. Treatment continued.

Nov. 11. Very slight redness of fauces; no exudation; general condition improved. Discharged.

CASE THIRD.—M. L——, age twenty-five; a seamstress. Admitted to Female Medical Ward September 18, 1867. Since admission has been under treatment for chronic dysentery.

Nov. 10. Complains of soreness of throat and pain in swallowing; fauces are quite red; no exudation; general condition unchanged with the exception of some increase in frequency of the pulse. Ordered acid carbolic and potass. chloras.

Nov. 16. Difficulty in throat has entirely disappeared.

CASE FOURTH.—M. C——, age nineteen; a servant. Admitted November 15th. States that she had a chill on the 12th, followed by fever which has continued till the present; that her throat began to get sore at the same time, and has become progressively worse; that in other respects her health has been good.

Has the appearance of being a healthy young woman. The skin is warmer than natural, moist: pulse ninety-three; moderate force; tongue slightly coated; dry; no appetite; thirst; bowels constipated.

A swelling of the throat beneath angles of lower jaw, tender to the touch; fauces red; tonsil so much swollen that they almost touch; a patch of exudation on the left; voice nasal; deglutition difficult and painful. She states that she has had two similar attacks before, the last one two years ago, and that the tonsils suppurated both times.

R.—Ex. Colocynth. C. grs. xv at bed-time.

Also Acid Carbolic and Potas. Chloras.

Nov. 16th. Swelling of tonsils greater; can scarcely swallow at all; bowels moved freely by the cathartic. In other respects no change. Ordered warm fomentations. Treatment continued.

Nov. 17th. Throat feels easier this morning; tonsils not quite so much swollen; expectorated considerable amount of yellowish matter during night, which she thinks came from the tonsils. Treatment continued.

Nov. 18th. Swelling of the tonsils and redness of fauces beginning to diminish; febrile symptoms subsiding. R.—Acid Tannic, $\frac{3}{5}$ ss. Aq. $\frac{3}{5}$ iv. M. S. Gargle three times a day. Other treatment continued.

Nov. 23d. Local and general symptoms have gradually disappeared since last report. No change made in treatment. Discharged.

CASE FIFTH.—M. B——, age twenty; a maid of all work. Is small, delicate, anaemic and evidently much prostrated. Complains of sore throat and pain in the back. The tonsils are somewhat swollen; the fauces quite red. On the left tonsil and anterior pillar is a superficial ulcer with a white surface, about half an inch in diameter. On the right anterior pillar is a similar ulcer, but much smaller. The voice is somewhat hoarse.

The face is flushed; the skin dry; temperature one hundred and one and a half; pulse one hundred and eleven, rather full, quite compressible; tongue clean and rather red at tip; a heavy whitish coat posteriorly; no appetite; considerable thirst; bowels regular. She expectorates a considerable amount of thin transparent mucous, but has no cough nor thoracic symptoms. Some abdominal tenderness, more marked in right iliac fossa; slight tympanitis. She states that on the tenth she had a chill followed by a fever, which has not yet abated; that her throat began to get sore at the same time, and has grown progressively worse. Prescribed Acid Carbolic and Potass. Chloras. in one-half the dose given in case first.

Nov. 21st. Ulcers increasing in size and depth; pulse one hundred and two; temperature one hundred and two degrees; respiration thirty-six; no marked change in other symptoms.

R.—Acid Tannic, $\frac{3}{5}$ ss.

Aquæ, $\frac{3}{5}$ iv.

M.—S. Gargle four times a day.

Other treatment continued.

Nov. 27th. Local condition unchanged; pulse ninety; temperature ninety-eight and one-half degrees; respiration thirty-six.

R.—Argent. Nitrat., grs. v.

Aq. Distil., $\frac{3}{5}$ ss.

M.—S. Apply with brush to ulcer twice daily.

To stop carbolic acid and chlorate of potash, to continue the gargle. Also:

R.—Ferri. Citrat.. $\frac{3}{4}$ j.
Vini Catawb., $\frac{3}{4}$ ij.

M.—S. $\frac{3}{4}$ ter in die, and ale a bottle daily.

Dec. 2d. General condition improving; little or no fever; ulcerations diminishing in size; fauces less red. Treatment continued.

Dec. 5th. Is sitting up; ulcers healing slowly; has a cough this morning and is quite hoarse. Ordered the following expectorant:

R.—Morph. Sulph., grs. ij.
Potas. Chlorat., $\frac{3}{4}$ ij.
Syr. Scillæ.
Syr. Ipecac.
Aq. Rosarum.
Aquæ, aa ss $\frac{3}{4}$ j.

M.—S. $\frac{3}{4}$ ij every three hours.

To stop the gargle and continue other treatment.

Dec. 10th. General condition improving; ulcers have almost entirely healed; still some pain in deglutition; hoarseness and cough. To omit the potas. chlorat. from the expectorant. To continue the iron and ale. Continued to improve until December 16th, at which time there was an increase of hoarseness, pain in throat and chest. Was ordered the expectorant mixture containing potas. chloras. with addition of acid. carbolic. gtt. j to each dose. This treatment was continued till January 1st, 1868, without marked change in condition of patient.

CASE SIXTH.—M. M——, age thirty-five; a domestic. Is a large healthy looking woman. Complains of pain in wrists, elbow, knees and ankles; also of some soreness of throat and pain in deglutition. These symptoms have existed since the fifteenth.

There is no swelling and little tenderness of the joints complained of, and no redness confined to them. The fauces and neighboring parts are somewhat red; a small patch of exudation on left tonsil. She states that her throat is getting much better. There is a slight erythema of the whole surface; skin moist; temperature one hundred and one degrees; pulse one hundred

and eight, good force; tongue slightly coated; little appetite; considerable thirst; no thoracic or abdominal symptoms. R.—Vin. Colchic. Radic. 3ss every four hours. Also Ex. Colocynth. Co. grs. xv at bed-time.

Nov. 19th. Colchicum causes some slight nausea and vomiting; pulse ninety-six; temperature ninety-nine and one-half degrees. In other respects no change. To take Vin. Colch. Rad. 3 one-third ter in die, and of the Potas. Chloras. and Acid Carbolic mixture 3ij every three hours.

Nov. 20th. Erythema has about subsided; no feeling of soreness in throat, but there is still a little redness of the fauces, and the exudation remains; pains in joints diminishing; pulse ninety; temperature ninety-nine degrees. Treatment continued.

Nov. 26th. Discharged well.

CASE SEVENTH.—M. C——, age nine. November 19th, states that she had a chill on the seventeenth, followed by fever and sore throat. The last symptom has been growing worse. Previous health good.

Fauces are red; slight superficial ulceration of left tonsil; painful deglutition; face flushed; skin hot, dry; pulse one hundred and twenty; considerable force; tongue rather red, a whitish coat; no appetite; thirst; constipated; no abdominal or thoracic symptoms. R.—Potas. Chloras. Mix 3jj every three hours. Magnes. Sulph. 3j at once.

Nov. 27th. Symptoms have gradually abated since last report. No change made in treatment. Discharged well.

(Case fifth subsequently convalesced well and was discharged.)

Miami Medical College Dispensary.

Medical Service of PROF. E. B. STEVENS.

Locomotor Ataxia.—Prof. Stevens presented to the class the following case:

Dennis Ryan:—Your particular attention gentlemen is directed to the *locomotion* of this patient. You observe, as he walks across the room, his peculiar inability to control his steps. He steps off, you notice, very much as if he wore a pair of badly constructed artificial legs. There is, as you notice, a sort of jerk or snap with each step. We call this an inability to co-ordinate the muscular movements of his inferior extremities, and it con-

stitutes the peculiarity of the disease with which this patient is afflicted—a rare disease only recently carefully observed, and, therefore, of special interest to you; it has received the name of *Locomotor Ataxia*.

The history of this case is as follows: Dennis enlisted in the volunteer service in 1861, when he was perfectly healthy. He could march thirty miles a day as comfortably as the best soldier. First noticed a sense of weakness and rheumatic pains in 1863; before being mustered out in 1865, was unable to keep up on the march—was obliged constantly to lag. For a year past he has no sexual appetite, no erections or capacity in any degree, but two years ago had both desire and capacity in excess. You observe his present condition, in addition to his disability to control his locomotion; he enjoys an excellent degree of good health; his muscles are full and hard, his appetite is good and he rests well.

It will interest you to compare this case with what is now known of this class of cases. It has been quite uniformly observed that there is, first, a loss of muscular power with rheumatic pains; these rheumatic pains constituting a permanent feature of these cases, usually continuing throughout their history. Second. There is generally observed disturbance of vision, irregular contraction of the pupils, with squinting. This has not been noticed in the case before us, although when questioned, Dennis thinks there was something of the kind, some irregularity; but this is so uncertain that it is fair to suppose that it has not been a feature of any importance in this case.

Third. Derangements of the sexual appetite have been quite uniformly observed; usually an excess of appetite, followed by spermatorrhœa and incapacity. This has been well marked in the present case.

Fourth. A gradual loss of co-ordination in the various acts of volition. *Sometimes* this is seen more especially in the upper extremities. Thus a man attempts to carry food to his mouth—he does so with a jerk—he strikes his face without control and with violence. But this lack of co-ordination is more apt to be observed in the lower extremities, as is seen in the peculiar character of locomotion in the case before you. This matter of co-ordination is not difficult to understand. When a man moves his arm, as in the act of eating, or when he steps off in ordinary walking, there is a certain control not only of the extensor but

of the flexor muscles. This control is such as to make a just adaptation of the opposing forces, and co-operate with the will in its proposed undertakings; but in the present case this muscular control is lost; there is no adaptation; the individual ceases to co-ordinate his various sets of muscular action, and his arms or his legs go off without any control or order.

Fifth. With this gradual loss of the power of co-ordination the patient settles down into a confirmed awkward, irregular gait. This is seen in the case of the patient before you, his locomotion being that of badly constructed artificial limbs, or the gait of a man partially intoxicated.

The duration of this disease is very various. Some cases run a very rapid course, terminating in a few months. Some run along for many years. In the few post-mortem cases, which have been made, the pathological condition consists in a condition of degeneration of the spinal cord, greatest in the lumbar region of the cord, but extending upward.

The question of treatment is very much out at sea. If I were called early in the history of one of these cases, and made out my diagnosis satisfactorily, I should use cups, leeches and general antiphlogistic treatment; but we are not generally called upon for advice in the early stages of this disease. A great variety of treatment has been suggested; the moxa, cups, iodide of potash, belladonna, ergot, cold douche, sea-bathing, electricity, etc. All of these are commended to you chiefly as empiric remedies, and, so far as I have investigated, are of uncertain value and effect. Recent reports appear to give more importance to the effects of nitrate of silver than any other therapeutic agent which has been tried. Several cases are recently reported in the *London Medical Gazette*, which seem to indicate this as an important remedy; and I propose to try the effects of this agent in the present case, hoping to be able to present him before you before the close of the session, that you may have an opportunity to judge of the value of the treatment instituted. For the present I shall put this patient on one-fourth gr. doses of nitrate of silver repeated three times a day.

Special Selection.

A Suspension Splint for Treating Simple and Compound Fractures of the Leg.

By E. A. CLARK, M. D., Resident Physician, St. Louis City Hospital.

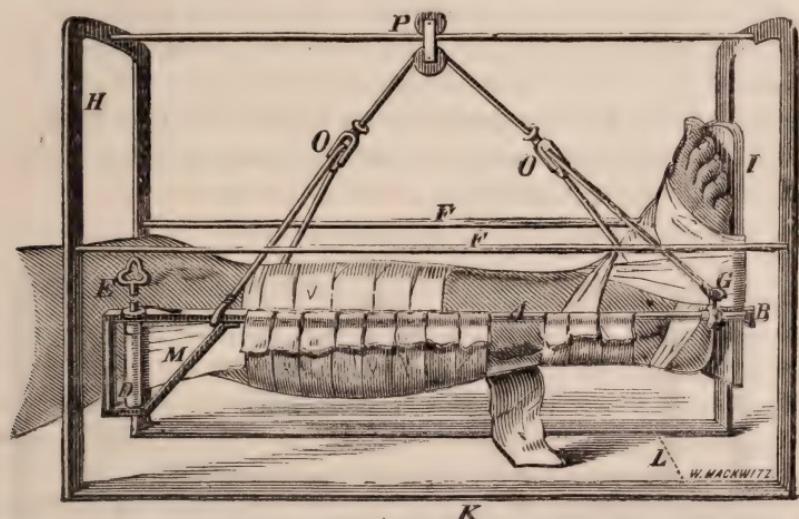
THE great necessity for a well adapted apparatus in treating fractures of the leg, suggested the utility of the instrument I have designed in the following wood-cut, which, not only answers every practical purpose in treating this class of fractures, but also contributes very much to the comfort of the patient, who while he is enabled to execute every movement of which the sound limb is capable, yet can not displace the fracture or modify the force of extension. In presenting this apparatus, I claim an advantage over those invented by Hutchinson, John Neill, Crandall and Salter, not only for the means of extension and counter-extension, but also its adaptation to the treatment of compound fractures of the leg, as represented in figure No. 1. And considering the simplicity of this instrument, with its cheapness and application to every variety of fractures of the leg, will certainly give it the precedence with those who may venture to use it in a single case. The apparatus is such as may be made by any blacksmith, or indeed by any ingenious surgeon in a case of necessity, when a wooden frame and two hoops with a common iron pully will answer quite as well as the instrument which I have had made of iron on the following plan.

The two arches represented by the letter (H,) at one end, are made of iron bars one-eighth of an inch in thickness, and three-fourth of an inch wide. These arches are continuous with the bottom pieces (K,) which support them upon the bed and measure twenty-two inches in length, making the distance between the two arches, which are also supported on the sides by the two slender bars (F.F.) While the bar extending across the top, upon which the pully (P) glides, should be made flat, with the long diameter perpendicular so as to prevent it bending with the weight of the leg. The width of the arch under which the leg is suspended, as indicated by the letter (L,) should be fifteen inches, and the arch eighteen inches from the surface of the bed.

This description will be sufficient to indicate the proportions of the exterior apparatus. The bars represented by the letter (A,)

in which the leg is suspended, should be about two feet in length, unless when the fracture is too close to the knee, and it may be

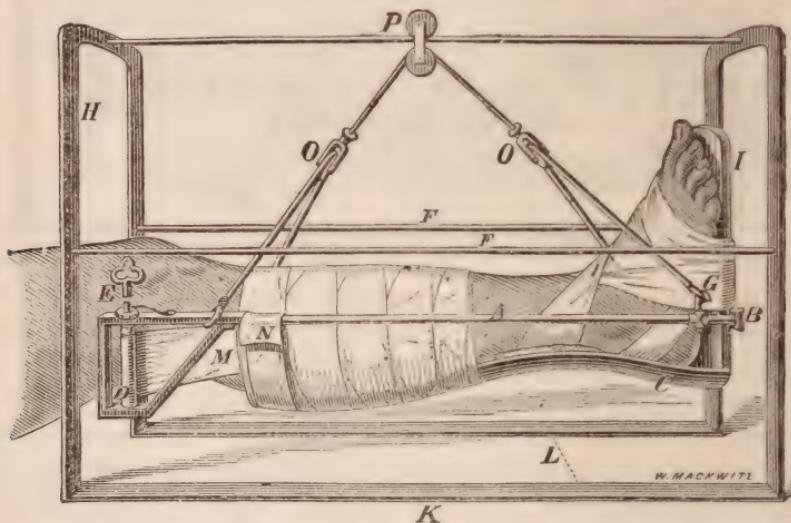
No 1.



necessary to attach the adhesive straps (M) above the knee, then the bars may extend to near the perineum if necessary. The crossbar passing beneath the bracket at (B,) and upon which the foot rests, should be flattened and five inches in length, so as to allow ample space for the limb to rest between the bars; the space between these bars at the upper end should ordinarily be about six inches. The splint (C,) upon which the leg rests, in figure No. 1, should be fluted upon its upper surface so as to conform to the shape of the leg, while it is also made oval upon its under surface, so that both the legs and the splint may be included in the bandage shown in figure No. 1, by which means any displacement may be corrected in the fracture and the bones kept in perfect apposition. The foot piece (I) should be attached to the posterior splint at an obtuse angle, so as to correspond with the natural position of the foot. The foot is bound to this piece by means of adhesive straps which may embrace the whole of the foot, and extend partially over the ankle, but not so as to arrest the circulation, as by the figure of eight bandage formerly used around the ankle for making extension. The leg then, as seen in figure No. 1, is supported upon the crossbar passing under the bracket (B) attached to the foot-piece, and by resting upon the strap (N,) pinned over the bars (A) on either side; while the extension and counter-extension is effected by means of the bar

across the foot-piece below, and above by means of adhesive straps three inches in width, as indicated by the letter (M,) which are attached to the sides of the leg, begining just above the point of fracture, and passing up to be wound around the cylinder (D,) which is three and a half inches in length, and turned by means of an ordinary clock key, represented by the letter (E.) This cylinder is held in any position to which it may be turned, by a ratchet and wheel placed upon the upper surface of the bar, as indicated in the diagram.

No. 2.



It will be observed in figure No. 2, that there is no posterior splint as in the other diagram, but the leg is supported entirely by strips of muslin pinned over the bars on either side, which renders this apparatus more appropriate for the treatment of compound fractures in which the wound may be examined and dressed when necessary, by removing one or more of these strips, which may be replaced by new ones without disturbing the fracture. The attachment of the foot-piece in this dressing does not in any particular differ from that of figure No. 1. The means of suspension is the same in both these dressings, which, by means of the pulley at the letter (P,) the patient is enabled to move his limb, or even his body, forward and back to the extent of the length of the bar upon which it glides, and by means of the cord playing over she under wheel in the same pulley, the patient is able to flex and extend the knee by depressing or elevating the

foot, which movement can be executed by a very slight effort on the part of the patient, while at the same time he can swing the leg from side to side to any extent within the space of the arches; and by means of the cords playing through the pulleys at (O O,) the leg can be rotated to any extent, even to allow the patient to lie upon his side, if he desires, without disturbing the fracture in the least. It will be observed in the diagrams that at the letter (G) there is a thimble, which can be made to slide upon the bar, by means of which the lower end of the leg can be elevated or depressed at the will of the patient, by sliding this thimble forward or back, and fixing it at any point by means of the little thumb-screw attach to this thimble. In developing the utility of this apparatus for the treatment of fractures of the leg, I have tried various means of attaching the foot at the bottom, such as the muslin and flannel bandages in the form of a figure of eight around the ankle, covering the foot also as far as the toes; but have always found them objectionable from the great amount of pressure and consequent arrest of the circulation in the foot, though the flannel bandage is much less objectionable than the muslin. But I have been able to obviate this objection, by the use of the adhesive plaster attached over the front of the foot, and around the foot-piece, as shown in the diagram; this I have ordinarily found quite sufficient, unless in rare cases, when an unusual counter-extending force is required, it may become necessary—as very aptly suggested by Prof. Hammer of this city—to pass a strip of adhesive plaster beneath the heel and around the foot-piece, which adds very much to the strength of the dressing. I have recently treated six cases of fractures of the leg with this apparatus, in which both bones were fractured, and in which there was more or less shortening in each case, with excellent results in all of them, without allowing the least deformity or shortening, while the patients were all grateful for the comforts allowed them by this apparatus during their confinement.

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

Chronic Aural Catarrh.

BY A. D. WILLIAMS, M. D., CINCINNATI.

THE acute aural catarrh, as before stated, is very apt to subside into the chronic form and then continue indefinitely. When it is not the result of acute inflammation, its progress is *very slow and very insidious*. My observations would lead me to think, and I believe I am correct, that chronic aural catarrh is nearly always an extension of chronic catarrhal inflammation of the throat into the eustachian tube and cavity of the tympanum. This is extension by continuity, and every body knows how easy that may take place, especially in membranous structures. At all events the throat is nearly always more or less involved in all these cases, and it is reasonable to suppose that the throat trouble was the primary affection as it is much more exposed and more liable, consequently, to attacks of inflammation than the cavities of the tympana, which are well protected from external influences, and particularly against the sudden atmospheric changes, which are so fruitful causes of throat inflammations. Even where the throat is quite healthy, it is easy to suppose that the fauces have gotten well, while the catarrh of tympanum, when once established, is, to a great extent, self-perpetuating, as in simple otorrhœa, and will very rarely get well without treatment. I do not mean, however, by all this to deny that there is any such thing as an independant chronic aural catarrh, but simply wish to say that it is extremely rare, and I do not now remember ever to have seen such a case. The throat affection is so common that I almost look upon it as an essential part of the aural disease. Patients indeed seem to have a correct idea of the matter, and nearly always date the ear trouble back to a *severe cold* in the head or the throat.

Chronic aural catarrh is the most frequent cause of partial deafness, *hardness of hearing*, rarely of complete deafness; hence I dwell upon it somewhat in detail. Its deleterious effects upon the ear result from the ordinary changes that take place in any

mucous membrane in consequence of long continued, frequently repeated inflammation. The membrane atrophies become dry and ceases to be a mucous membrane proper.

Subjective Symptoms.—The patient is apt to notice first, that he is a little hard of hearing. His friends may call his attention to the fact. This gradually increases till it, in the course of a few months, becomes decidedly annoying to him. His friends often have to repeat things so as to make him understand. Soon a very faint noise makes its appearance. This may have been present before the hardness of hearing was observed. Sometimes it is the first subjective symptom. Patient, for instance, hears it only at night when everything is still. Generally increases gradually and may get to be distressing. Persons compare it to hammers, bells, steamboats, cars running; "blowing off steam" is a favorite comparison. Just this week a patient told me "it often thunders in my ears." This great variety of noises is the most annoying, and causes the saddest and most distressing complaint of the patients. How often do they say, "I would give the world to get rid of these noises! Anything to relieve me of them!"

The deafness seems to be a small matter to them. Usually there is a sensation of fullness and heaviness about the ears. A "*choked*" feeling in the throat. Deglutition seems to be difficult. Constant efforts are made to get something out of the back part of the nares or upper part of the throat. Occasionally crackling noises in the ears, like the bursting of bubbles, particularly in the act of swallowing. These noises are increased by fatigue. They grow louder in the stooping posture. More or less dizziness or swiming in the head is complained of. A young lady, now under treatment can produce a decided mucous *rale* in her ears by holding nose and mouth and blowing, and thus forcing the air into the tympana. This crackling I can easily hear by listening closely with my ear close to her's.

Objective Symptoms.—The external meatus is normal except that it is generally dry, sometimes a little red toward the bottom: The membrana tympani is decidedly redder than natural. Considerably thickened, with a smooth shining surface, but its natural "*pearl gray*" is changed into a "*dark gray*." It has a dark, slightly red appearance, due to the congested mucous membrane on the inside.

The short process and handle of the malleus are distinctly vis-

ble, showing that the epithelium is not changed. The "cone of light," instead of being triangular, is mostly reduced to a mere point, not always, however. More or less change in form of membrane.

The rule is, that a catarrh of the throat is always present. Never omit to look at it, even though the patient protests that he has ever had any trouble in the throat. Almost without exception it will be found inflamed more or less severely, and usually enlarged tonsils, if they have never been amputated. With a part or all of these symptoms, a reliable diagnosis of chronic aural catarrh may be made. But this must be confirmed by inflating the tympana. Blow the wind into the cavity of the tympanum, and the diagnosis will either be corroborated or negatived. (The method will be described hereafter.)

Every catarrh carries with it the idea of purulent or muco-purulent secretions; and if there is any secretion whatever in the cavity of the tympanum, we can very easily detect it by the noise made by the stream of air as it passes through it. The nature of the sound will give the nature of the secretion, whether it is very tough or quite fluid. It is just as easy to detect the presence of fluid in the drum of the ear, as it is to diagnose its presence in the air cells of the lungs. Upon inflating the middle ear, if we find that it is filled up with secretions, such as we would expect to find in catarrhs, our general diagnosis of aural catarrh is established. On the contrary, if the middle ear is perfectly free, and the wind passes into it in a full free stream without any interruption or cracking noises, then our diagnosis is disproven. At the same time we inflate the ear, we must determine whether the disease is confined to the eustachian tube, or to the cavity of the drum, or whether both are involved. It is said that there is such a thing as an independent catarrh of the ear trumpet. In my estimation it is at least a difficult thing to diagnose positively.

The prognosis in general is not so favorable as we would wish it to be. According to my experience, about one-half will get prematurely well; a number get better, but continue to relapse every little while, even during the treatment; another portion are not affected in any way. The disease in them seems to be immovably *fixed*. In such cases there has been, in all probability, some permanent change taken place in some of the essential parts of the auditory apparatus. In children we can make a

much more favorable prognosis than in grown persons, especially where the disease is of several years standing in these last.

Treatment.—The condition of the middle ear is about this: The mucous membrane of the eustachian tube is inflamed, swollen and constantly secreting mucous or pus, or mixture of the two. The opposite walls of the tube come together, in consequence of the swelling and close it completely.

The mucous membrane of the tympanum is inflamed, and the catarrhal secretion is constantly accumulating and fills up the cavity, not having exit into the throat through the tube. The first indication is then to open up the eustachian tube and allow the mucous in the drum to escape into the throat, and thus free the tympanic cavity. It is this accumulation, or a swollen condition of the mucous membrane, which may cause a like amount of pressure in the drum, that causes the feeling of heaviness and fullness in the ear.

When we remove this accumulation, all the symptoms that depend upon it disappear. We accomplish all this by inflating the middle ear. The air opens up mechanically the eustachian tube, and not only *allows* whatever is in the drum to escape, but even forces it out. In other words, we cleanse the middle ear by *washing* it with air, just as we cleanse the external meatus by washing it with water. Simple inflation then is the best treatment for chronic aural catarrh. It helps to make out the diagnosis, acts mechanically upon the tube and cavity of the tympanum, and therapeutically upon the lining membrane of both. It should be repeated every day for a week or two, and then every second or third day for several weeks. In favorable cases, the first few inflations make a decided impression upon both the feeling and hearing power of the ear.

According to the amount of improvement is the prospect for final recovery. Upon the result then, of the first inflation will depend the prognosis in every particular case. If adhesions have formed between the walls of the tube or the membrana tympani and promontory, or anywhere else, the mechanical effect of the air will be most likely to break them up. This is the chief treatment in catarrh of tympanum, and in fact in all tympanic affections. With inflation at his command the aurist is able to attack, at least with tolerable show of success, this most formidable of all ear diseases. (The dangers and details of inflation will be referred to at another time.)

Of general medication I have serious doubts as to its efficacy. Many authors advise specially the *alterative treatment* so called. I have tried it, as I think, fairly, but as yet have seen no visible benefit result from it. If there is any special indication for internal treatment, aside from the chronic catarrh of the drum, I of course advise it. If the health is not good, appetite bad, can not sleep, syphilitic taint, or anything of that kind, internal medication is necessary. In ordinary counter-irritations in these tympanie affections, I have not the least confidence. The local application of medicated solution by injecting them into the cavitas tympani through the eustachian tube, as advised strongly by Gruber, of Vienna, is, in my estimation, more hazardous than beneficial. Formerly I used them a great deal; lately I have abandoned them entirely, for the reason that I sometimes excited acute inflammation in the drum. This is to be avoided. The simple injection of air will do as much toward restoring the hearing, as any medicated solutions. I have said above that the throat is always involved. It should be treated with great care and persistence. If the tonsils are enlarged, as is nearly always the case, amputate them. I look upon this as a *necessary* part of the treatment, and always advise and urge it upon the patient. *Polypi* of the Tympanum and *Tympanic Otorrhœa* will be the next subject.

Editor's Table.

MEDICAL EDUCATION.—We shall scarcely soon forgive Dr. Davis for his editorial on this subject in the February number of the "*Examiner*." Not that the article was so much remarkable for what it says, as for what it does'nt say ; not for its want of gravity, for it is solemn, grave and oracular, as the bird of wisdom. But it came to hand, the last thing we attempted to enjoy or digest in the way of reading, just as we finally surrendered to typhoid fever, and its queer suggestions and grave folly, took possession of our brain and fancies all through the stage of terrible head suffering to

which we submitted for a fortnight. Not the actual matter of our neighbors paragraphs, but the offshoots of semi-delirium.

Phantoms and phantom assemblages danced before us, whether asleep or awake, and all responded to the same key-note. A long, lank phantom, dressed in clerical black, forever discoursed wisdom on education, and all other conceivable topics to whoever would listen. He seemed the phantom patriarch of all the phantoms. He addressed them as their Great Father; obediently they acknowledged him as happy offspring. But to my half crazy notion, it did seem wonderful how that black phantom could talk—how *easy* he could talk. It seemed as if tap the plug and the stream was perennial. And yet we had not brains enough left to even remember that anything was said, except the burden as wearisome as Poe's "Raven"—"I am the father of it all"—"we are your children!" Now that it is all past and the progress of fever has so long displaced these visions, we can only look back to the whole thing as wonderfully like some assemblages, and some teachings, and some oracular never failing orators, which were not all phantom.

In sober earnest, we have become thoroughly weary of this disposition of Dr. Davis to push his pet ideas of conducting medical teaching upon the profession. He is as dogmatic, and free from argument in his orations and editorials, as though he held a *patent right* on medical teaching in the United States, and he has been so injudiciously flattered by some of our weak brethren, that he seems to feel a sort of ownership of the American Medical profession.

So far as the action of the convention of teachers is concerned, we are free to accord that body an earnest purpose and wholesome spirit of reform; but we think the plan adopted was too radical, too sweeping in its changes; hence for the present certainly impracticable, and, therefore, injudicious. Several months ago we endeavored to express our views somewhat fully upon this whole subject, in a review of the circular of the committee appointed by the Convention, and Dr. Davis does us the honor to specially notice that editorial.

In that article we expressed our hearty approval of several of the propositions; they were not only *desirable* reforms, they were at once "*easy of execution*" with the general co-operation of the schools. Of these was *Proposition first*, to demand a certain positive standard of *preliminary education*; *Proposition third*, to make

the minimum duration of the regular annual lecture term six months; *Proposition fifth*, to require actual and full attendance on the lectures, the certificate of the Dean or Secretary to be necessary to exhibit that fact and not mere tickets. Also of *Proposition fourth*, the requirement establishing the minimum number of professors, and the curriculum of study met our hearty endorsement.

But of the proposition second, prolonging the term of study to four years, with three courses of lectures, we said essentially that we were satisfied the present state of the American profession would render this of very doubtful propriety, and, if attempted at present, would rather tend to foster inferior schools with inferior requirements than to build up those wonderful paragons of which our neighbor of the *Examiner* speaks. But, finally, in respect to the graded system of medical teachings, Dr. Davis mistakes, or unfairly presents our views altogether. Out of deference and with courtesy for him and his pet, we did admit the possibility of its theoretical correctness; but we proceeded at once to give our reasons for thinking it would never be suited to American teaching. We said then, as we still think, that as the result of considerable observation, and some experience in teaching, and much opportunity for the analysis of medical students, as we have them in this country, we were sure it could not be carried out with either advantage or satisfaction; "and we were by no means sure it was even desirable to do so." We gave our reasons for this conviction at some length, and do not care to repeat them here.

We also have our doubts concerning the wisdom of the suggestions in regard to clinical instructions. The convention of teachers makes it peculiarly a part of the curriculum of the *third session*, and rather by inference discouraging the student from hospital attendance previously. With our present convictions, we should prefer the present custom, as in Cincinnati and other large cities, of placing the student in a position to see disease and become familiar with it from his earliest medical studies.

Finally, in reply to our expressed desire to educate the profession up to all these ideas of reform and progress, the *Examiner* retorts that it is not the profession but the "faculties of the colleges that need educating up." One of our Eastern contemporaries who is zealous for the right we are sure, but who has but little practical knowledge of this complex question, first started

this way of putting it. Our neighbor of the *St. Louis Medical Journal*, who is a veteran, and ought to know something of the habits and idiosyncracies of the American medical student, took up the cry, and now the *Examiner* joins in the chorus. We are not at all ready to admit its truth. We have not seen the evidence that the profession is so well educated on these points. It has not exhibited it in the right way. Again and again have we seen instances where medical students have been encouraged, or, at the mildest, *suffered by their preceptors* to go to schools of inferior requirements, in all respects, partly because of low fees perhaps, partly for other *easy reasons* perhaps. The evidence that our cotemporaries have seen has consisted in the utterance of empty resolutions at medical societies and conventions; resolutions suiting the artificial enthusiasm of the occasion, serving the vanity of some ambitious resolution maker, and meaning no more—being remembered no more—and acted upon no more than the perennial orations of my phantom in black.

"PLEASANT DRUGS"—DR. HIBBERD.—The rejoinder of Dr. Hibbard, which appeared in the last number of this journal, was received while we were unfitted by illness from any editorial work, hence it went to the printer on the credit of its author's name. Had we been well enough to read the sharp criticism of the *LANCET AND OBSERVER*, we presume we should have printed it all the same, from which all interested will learn the generous latitude of this Journal. The Dr. seems, in the present instance, to have gone on the idea "where's the use of a friend if you can't use him."

We have no disposition to enter into a controversy with our old friend, we still think we made our point in our January article, and with that we are content. Our advertisers will thank Dr. H. for so earnestly directing the attention of readers to their interests, and we are sure Dr. H. himself feels better now that his mind is relieved. So why should we not all be happy.

DEATH OF ARCHIBALD HALL, of the McGill University, Montreal.—The *Canada Medical Journal* announces the death of Dr. Hall, late Professor of Obstetrics, etc., in the McGill University, at the age of fifty-six. Dr. Hall was a man of ability, and had filled with great acceptability different positions in the school with which he was connected. He had also conducted with great energy the

British American Journal of Medicine and Physical Science. In all respects he is represented as a man of the first order in his personal and professional relations—one who will be missed in his city.

MARRIED.—March 3d, 1868; at New Richmond, Ohio, Dr. W. P. Kineaid, of Cincinnati, to Miss Rose Richardson. Accept our sincere congratulations Doctor!

Army Medical Board.

A CARD appears in the advertising department of this Journal announcing an Army Board to sit in the city of New York, on the first of May, proximo. For the further information of persons interested, we publish the following bulletin from the office of the Surgeon General of the United States:

MEMORANDUM

For the information of persons desirous of entering the Medical Corps of the U. S. Army.

[EXTRACT FROM LAWS OF THE UNITED STATES.]

ACT OF CONGRESS, Approved June 30, 1834

"SEC. 1. *Be it enacted, etc.,* That from and after the passage of this Act, no person shall receive the appointment of Asststant Surgeon in the Army of the United States, unless he shall have been examined and approved by an Army Medical Board, to consist of not less than three Surgeons or Assistant Surgeons, who shall be designated for that purpose by the Secretary of War; and no person shall receive the appointment of Surgeon in the Army in the United States, unless he shall have served at least five years as an Assistant Surgeon, and unless, also, he shall have been examined by an Army Medical Board constituted as aforesaid."

ACT OF CONGRESS, Approved July 28, 1866.

"SEC. 17. *And be it further enacted,* That the Medical Department of the Army shall hereafter consist of one Surgeon General * * * * One Assistant Surgeon General * * * * * One Chief Medical Purveyor and four Assistant Medical Purveyors * * * * Sixty Surgeons, with the rank, pay and emoluments of Major of Cavalry. One hundred and fifty Assistant Surgeons, with rank, pay and emoluments of First Lieutenants of Cavalry, for the first three years service, and with rank, pay

and emoluments, of Captains of Cavalry after three years service. * * * *

All candidates for appointment in the Medical Corps, must apply to the Surgeon General, U. S. Army, for an invitation to appear before the Medical Examining Board. The application must be in the hand writing of the candidate, stating age and birthplace, and be accompanied by testimonials from Professors of the College, in which he graduated, or from other physicians of good repute. If the candidate has been in the Medical service of the Army during the war, the fact should be stated, together with his former rank, and time and place of service, and testimonials as to qualifications and character from officers with whom he has served, should also be forwarded.

Candidates must be graduates of some regular medical college, proof of which must be submitted to the Board before examination, and must be between twenty-one and thirty years of age.

The morals, habits and physical and mental qualifications, of each candidate will be subjects for careful examination by the Board, and a favorable report will not be made in any case in which there is a reasonable doubt.

The following will be the general plan for examination:

1. A short essay; either autobiographical or upon some professional subject—to be indicated by the Board.
2. Physical examination. This will be rigid, and each candidate will be required to certify "*that he labors under no mental or physical infirmity, nor disability of any kind, which can in any way interfere with the most efficient discharge of his duties in any climate.*"
3. Examination as to general aptitude and education.
4. Written examination on anatomy, physiology, hygiene, surgery and practice of medicine.
5. Oral examination on each of the above mentioned subjects, and also on obstetrics, general pathology, chemistry, toxicology, medical jurisprudence and *materia medica*.
6. Clinical examination, medical and surgical, at a hospital.
7. Performance of surgical operations on the cadaver.

The Board will deviate from this general plan whenever necessary, in such a manner as they deem best to secure the interests of the service.

The Board will report the merits of the candidate in the several branches of the examination, and their relative merit in the whole, according to which, if vacancies exist within two years thereafter, the approved candidate will receive appointments and take rank in the Medical Corps.

An applicant failing at one examination, may be allowed a second after one year, but not a third.

No allowance will be made for the expenses of persons undergoing examination, as this is an indispensable prerequisite to appointment, but those who are approved and receive appointments, will be entitled to transportation on their obeying their first order.

If the result of the examination of a candidate be satisfactory, he will be offered a contract for duty as Acting Assistant Surgeon until such time as he can be appointed or commissioned as Assistant Surgeons.

The pay and emoluments of Surgeons and Assistant Surgeons are as follows :

	Aggregate amount receivable per annum.	Forage furnished horses when actually kept.	In time of war.	In time of peace.
Assistant Surgeon, under three years' service.....	\$120 83		2	2
Assistant Surgeon, over three years.....	137 50		3	2
Assistant Surgeon, over ten years' service.....	173 50		3	2
Assistant Surgeon, under ten years' service.....	179 00		4	2
Surgeon, over ten years' service.....	215 00		4	2

In addition to above, Surgeons and Assistant Surgeons are allowed an additional ration per day, after the termination of every five years' service.

Quarters and fuel, or commutation therefor, are also furnished to Medical Officers.

JOS. K. BARNES,

Surgeon General, U. S. Army.

WAR DEPARTMENT,

Surgeon General's Office,

January 1, 1868.

COLLEGE COMMENCEMENTS.—The medical department of the University of Louisville, held commencement exercises March 2d. Judge Bodley, in behalf of the Trustees, conferred the degree upon forty-six graduates, the largest class since 1856. Prof. Miller delivered the address.

The St. Louis Medical College held commencement March 2d, with forty-seven graduates. Prof. Gregory made the Valedictory.

The Missouri Medical College (St. Louis,) had its closing exercises February 20, with twenty-five graduates.

The Jefferson Medical College conferred the degree of M. D. on one hundred and fifty-nine, March 7th. Prof. Gross delivered the address.

The Cincinnati College of Medicine held its commencement February 21st. The degree was conferred on ten candidates.

Bellevue Hospital Medical College graduated one hundred and eleven candidates at its recent commencement, February 29th. Addresses were made by Clarence A. Seward, Esq., and others.

Medical Department of the University of New York. The commencement was held March 3d, with eighty-two graduates.

The College of Physicians and Surgeons of New York, held its sixty-first commencement March 5th. The Degree was conferred on one hundred and four graduates.

The Massachusetts Medical College held its regular commencement on the 11th of March. There were forty-eight graduates.

The Buffalo Medical College held its commencement February 25th. There were forty graduates. Prof. J. F. Miner delivered the charge to the graduates, who requested its publication.

The Dental College of this city held its commencement on the evening of March 4th. A class of nine young men graduated.

From these notices and others given in our last number, it will be seen that the full number of graduates are going out from the portals of our medical schools. Let us sincerely hope they are all duly impressed with the sacred nature of the calling—fully prepared for their duties, but willing to patiently wait for a public appreciation of their worth; this is the hardest of all, but our young friends must obey its mandate. Then let us hope for their abundant success.

The Miami Medical College closed a prosperous winter's course the last week in February, with thirty graduates. The Matriculation list was one hundred and thirty-six, (not one hundred and twenty-two as an esteemed neighbor has seen fit to print it.) Just now the Faculty, and a number of gentlemen interested in teaching, are engaged in the Spring Course, which commenced on the 15th March, and will continue until about the last of June.

Medical students are more and more learning to appreciate the advantages of Cincinnati as a desirable point to seek a medical education. This is shown in the unusually large number of medical students in this city last winter, numbering in the Miami and Ohio Colleges alone nearly four hundred matriculants. With the constantly increasing facilities for teaching here, the energy of our teachers, and the grand clinical advantages, the number of students looking toward this Mecca, must steadily increase.

Archives of Physiology.—We have received the first number of an elegant bi-monthly devoted to Physiology especially, and edited by Brown Se Quard, of Paris. This initial number is peculiarly attractive and valuable in its matter, with very fine illustrations.

Boston Medical and Surgical Journal.—We have neglected to notice recent changes which have taken place in this old and valuable exchange. With the end of January ult., it had completed its seventy-seventh volume, and its publishers determined to inaugurate the seventy-eighth with a new dress, larger pages, double column, and in all other respects vastly improved and beautified. With these improvements the old editors retire, and Dr. D. W. Cheever assumes the editorial chair, with Dr. O. F. Wadsworth as assistant. May the *Boston Journal* proceed with its healthy condition, and live another thirty-nine or forty years.

Bozeman's Speculum.—The selection in our last number, describing this new speculum, was taken from the *New York Medical Record*; by oversight no credit was given.

The Ohio State Medical Society will hold its next Annual Meeting at Delaware, on Tuesday the second day of June next.

The following Special Committees are expected to report:

Puerperal Convulsions, Thad. A. Reamy, Zanesville.

Aural Surgery, A. Metz, Massillon.

Surgery, W. H. Mussey, Cincinnati.

Amputation, R. L. Sweeney, Marion.

Ovariotomy, A. Dunlap, Springfield.

Practice of Medicine, W. J. Scott, Cleveland.

Obituaries, B. B. Leonard, _____.

Orthopaedic Surgery, F. B. McNeil, Sidney.

Diseases of the Eye, J. W. Hamilton, Columbus.

Incurably Insane, Drs. Brown, Pierce and Hamilton.

Medical Observations in New Mexico, G. S. Courtright, Lithopolis.

The Microscope, W. C. Hall, Fayetteville.

Hypodermic Medication, J. N. Weaver.

Amputation—Primary and Secondary, J. G. Kyle, Xenia.

Military Surgery, N. Gay, Columbus.

Cerebro-Spinal Meningitis, Isaac Kay.

We again suggest to our friends in different parts of the State to procure the notice of our meeting in the prominent newspa-

pers of their respective sections, and let us strive to make this, in numbers and interest, the most attractive meeting the society has ever known.

American Medical Association.

OFFICE OF PERMANENT SECRETARY,

W.M. B. ATKINSON, M. D.,
S. W. Cor. Broad and Pine Sts., Philada. }

THE Nineteenth Annual Meeting of the American Medical Association will be held in Washington, on Tuesday, May 5th, 1868, at 11 o'clock A. M.

The following Committees are expected to report:

On Ophthalmology, Dr. Jos. S. Hildreth, Illinois, Chairman.

On Cultivation of the Cinchona Tree, Dr. J. M. Toner, D. C., Chairman.

On Surgical Diseases of Women, Dr. Theophilus Parvin, Ind., Chairman.

On Rank of Medical Men in the Navy, Dr. N. S. Davis, Illinois, Chairman.

On Insanity, Dr. C. A. Lee, N. Y., Chairman.

On American Medical Necrology, Dr. C. C. Cox, Md., Chairman.

On Leakage of Gas-Pipes, Dr. J. C. Draper, N. Y., Chairman.

On Medical Ethics, —————, Chairman.

On Plan of Organization, Dr. C. C. Cox, Md., Chairman.

On Provision for the Insane, Dr. C. A. Lee, N. Y., Chairman.

On the Climatology and Epidemics of Maine, Dr. J. C. Weston; of New Hampshire, Dr. P. A. Stackpole; Vermont, Dr. Henry Janes; Massachusetts, Dr. Alfred C. Garratt; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. E. K. Hunt; New York, Dr. W. F. Thomas; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harriss; Missouri, Dr. Geo. Engleman; Alabama, Dr. R. Miller; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. W. H. Baker; Michigan, Dr. Abm. Sager; Ohio, Dr. J. W. Russell; California, Dr. F. W. Hatch; Tennessee, Dr. Jos. Jones; West Virginia, Dr. E. A. Hildreth; Minnesota, Dr. Samuel Willey.

On Clinical Thermometry in Diphtheria, Dr. Jos. G. Richardson, N. Y., Chairman.

On the Treatment of Disease by Atomized Substances, Dr. A. G. Field, Iowa, Chairman.

On the Ligation of Arteries, Dr. Benj. Howard, N. Y., Chairman.

On the Treatment of Club-Foot without Tenotomy, Dr. L. A. Sayre, N. Y., Chairman.

On the Radical Cure of Hernia, Dr. G. C. Blackman, Ohio, Chairman.

On Operations for Hare-Lip, Dr. Hammer, Mo., Chairman.

On Errors of Diagnosis in Abdominal Tumors, Dr. G. C. E. Weber, Ohio, Chairman.

On Prize Essays, Dr. Chas. Woodward, Ohio, Chairman.

On Medical Education, Dr. A. B. Palmer, Michigan, Chairman.

On Medical Literature, Dr. Geo. Mendenhall, Ohio, Chairman.

Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the Permanent Secretary.

W. B. ATKINSON.

Alum Crystallizations over Fresh Flowers.

MAKE baskets of pliable copper wire, and wrap them with gauze. Into these tie to the bottom, violets, ferns, geranium, leaves, chrysanthemums—in fact, any flowers, except full-blown roses—and sink them in a solution of alum of one pound to the gallon of water, after the solution has cooled, as the colors will then be preserved in their original beauty, and the crystallized alum will hold faster than when from a hot solution. When you have a light covering of distinct crystals that cover completely the articles, remove carefully, and allow them to drain for twelve hours. These baskets make a beautiful parlor ornament, and for a long time preserve the freshness of the flowers.—*Am. Jour. Pharmacy.*

PROLONGED GESTATION.—Dr. P. M. Rivers, of Waterboro', S. C., relates a case in which a hydrocephalic foetus was retained in utero until the completion of the twelfth month. The mother was troubled with abdominal pains at term, but these subsided after three days.—*Am. Jour. Med. Science.*

PROF. JOSEPH JONES OF NASHVILLE.—We are pained to hear

that the residence of Prof. Jones was recently destroyed by fire, together with many of his most valuable manuscripts.—*Medical Record.*

CIRCULAR No. 5—*Surgeon-General's Office—Report on Cholera.*—Dr. Crane, Assistant Surgeon-General U. S. A., has presented to the King of Prussia a comprehensive report of the course of the late cholera epidemic amongst the U. S. troops. This admirable work has created great interest, and been highly appreciated in military medical circles. The Russian Minister in Washington has received instructions to convey the thanks of the King to Assistant Surgeon-General Crane for this valuable work.—*Allgemeine Med. Central-Zeitung, Berlin.*

LEGAL PROTECTION OF MEDICINE.—The Legislature of Ohio has enacted a law requiring all practitioners of medicine in this State, to be graduates of some respectable medical college. We have lost our copy of the law, and, therefore, do not feel prepared to express any opinion upon its advantages. In this connection, however, we print the following abstract of a law which has been introduced in the Legislature of New York.

A bill for the prevention of quackery has been introduced into the Senate of the New York Legislature. It provides for the appointment, by the Governor of the State, of a Board of Medical Censors, to consist of a censor of physiology, surgery, anatomy, chemistry, *materia medica* and obstetrics, each censor to have a salary of \$2,000 per annum, and to continue in office for six years. Every State Medical Society to be allowed to keep in nomination before the Governor seven doctors of medicine, from whom he shall select censors. All medical students who pass an examination before all the censors to be given a diploma by the Secretary of State, denominating them as "physicians and surgeons," but those who fail to do so will not be recognized as doctors. Failing, however, only before the censors of surgery, a certificate acknowledging them as physicians will be given. Students of *any* university, school or college, of the State, are entitled to the certificates after having gone through with the examinations. All questions put to candidates to be in print or handwriting, and no candidate to be examined upon therapeutics. No one will be allowed to set himself up as a doctor who has not the State di-

ploma. A New York exchange, speaking of the subject, says: "The law was designed, we understand, at a conference of allopathic and homeopathic physicians in New York City. Such a law every respectable physician will desire, and every community ought to be ambitious for it, for it will protect them against the worst and most insidious class of swindlers." We sincerely trust that this law will pass and receive the endorsement of the Governor. The Legislatures of Pennsylvania, New Jersey, Delaware and other States, would do well to adopt a similar act. The country is filled with *quacks*, and it is time that they be put down.—*Newspaper Exchange*.

The Miami Medical College.—Resignation of Prof. Chapman.—Prof. C. B. Chapman, M. D., has resigned the Chair of Chemistry in this College. He was engaged in the reorganization of the school in the Spring of 1865, and has been deeply interested in its success during his entire connection with the institution. The pleasant relations which existed between him and the Faculty may be understood from the following resolutions adopted on the occasion of his tendering his resignation:

WHEREAS, Prof. Chandler B. Chapman having occupied the Chair of Chemistry in the Miami Medical College since its reorganization in 1865, has now retired from this Faculty.

Resolved, That we part with Prof. Chapman with sincere regret, and commend him to the friendship of the scientific wherever he may cast his lot.

Resolved, That we desire to place it on record that our personal relations with Prof. Chapman, during our entire association as a Faculty, have been uniformly of the most cordial and pleasant character.

Resolved, That this expression be placed on our records, and a copy furnished to Prof. Chapman.

Glycerin Solutions.

FOR the benefit of those who prefer using glycerin rather than alcohol as a solvent for many agents, we append a few articles with their solubility in glycerin. Sulphur requires two thousand parts of glycerin; iodine, one hundred parts; red iodide of mercury, three hundred and forty parts; corrosive sublimate, fourteen parts; sulphate of quinia, forty-eight parts; tannin, six parts; muriate of morphia, nineteen parts; tartar emetic, thirty parts; veratrine, ninety-six parts; atropia, fifty parts; iodide of sulphur, sixty parts; iodide of potassium, three parts; sulphuret of potassium, ten parts. These solutions are called *glyceroles*. —*Jour. Appl. Chemistry.*

Abstracts and Selections.

PRACTICE OF MEDICINE.

Memorandum on the Nature and the Mode of Propagation of Phthisis.

BY WM. BUDD, M. D., Consulting Physician to the Bristol Royal Infirmary.

"He that would follow philosophy must be a freeman in mind."—PTOLEMY

Note from Dr. Paget to the Editor of the *Lancet*.

SIR:—The paper I send enclosed was received by me last December, in a sealed packet, from Dr. William Budd, of Clifton, with a request that I would take charge of it until he should direct me to break the seal. At his desire, I opened the packet a few days ago, and I now send you the contents, requesting the favor of their early publication in *The Lancet*. They are an epitome of what Dr. W. Budd has been for some time intending to publish in a more complete form; but his intention has been frustrated, and is still delayed by the engrossments of professional practice and other circumstances beyond his control.

You will at once perceive the originality of his views, and their very high importance if established. If the evidence, now given, of their truth be incomplete, it is at least abundantly sufficient to raise them out of the region of mere hypothesis, and ensure their careful consideration by pathologists.

In a letter to me, Dr. W. Budd says he can show strong reason for believing that his views on tubercle, with certain qualifications, apply to cancer also.

I am, etc.,

Cambridge, Sept. 30, 1857.

G. E. PAGET.

The following are the principal conclusions to which I have been led regarding phthisis or tubercles:

1st. That tubercle is a true zymotic disease, of specific nature in the same sense as typhoid fever, scarlet fever, typhus, syphilis, etc., are.

2d. That, like these diseases, tubercle never originates spontaneously, but is perpetuated solely by the law of continuous succession.

3d. That the tuberculous matter itself is (or includes) the p

cific morbific matter of the disease, and constitutes the material by which phthisis is propagated from one person to another, and disseminated through society.

4th. That the deposits of this matter are, therefore, of the nature of an eruption, and bears the same relation to the disease, phthisis, as the "yellow matter", for instance, bears to typhoid fever.

5th. That by the destruction of this matter on its issue from the body, by means of proper chemicals or otherwise—seconded by good sanitary conditions—there is reason to hope that we may, eventually, and, possibly at no very distant time, rid ourselves entirely of this fatal scourge.

The evidence on which these conclusions are founded, is drawn from the following principal sources:

(a) Considerations based on the pathology of phthisis, as showing it to consist in the evolution and multiplication within the organism of a specific morbid matter, with a universal tendency to elimination, and casting forth of the same, after the type of zymotic diseases generally.

(b) Actual instances in which there was evidence to show that phthisis was communicated from one person to another.

(c) The geographical distribution of phthisis in past and present times, and, especially, its great fatality now in countries which, when first discovered by Europeans, were known to be entirely free from it.

(d) Its much greater prevalence in low levels and among crowded communities, and its entire absence, unless by casual importation, at very high levels—conditions which are well known to rule, in the same directions, the spread of zymotic diseases generally, and especially of that group in which, as in phthisis, the morbific matter is cast off in a liquid form.

(e) Its very high rate of prevalence in convents, harems, barracks, penitentaries, etc.—that is to say, under the very social conditions which are known most to favor the propagation of diseases of the zymotic group.

Among the data relating to geographical distribution, the following striking facts may be here mentioned:

1st. When the South Sea Islands were first discovered, phthisis did not exist there. Since the aborigines have come into intimate contact with Europeans, the disease has not only made its

appearance among them, but has become so wide-spread as to threaten their extermination.

The contrast between original entire immunity and present extreme fatality is very striking, and can only be rationally explained by the importation of a new and specific morbid germ.

Try every other supposition, and the facts are inexplicable; make this one supposition, and they are at once explained.

2d. The late Dr. Rush, of Philadelphia, who made very accurate inquiries to determine the point, satisfied himself that when America was first discovered, phthisis was unknown among the native American Indians. Now it is very fatal to them.

The very significant contrast here exhibited between the past and present history of these two races, in respect to phthisis, is exhibited at once, and at the present time, among the negro race in Africa, and different parts of the area of that great continent;

It is well known that negroes are peculiarly liable to phthisis.

Now, everywhere along the African sea-board where the blacks have come into constant and intimate relations with the whites, phthisis causes a large mortality among them. In the interior where intercourse with the whites has been limited to casual contact with a few great travelers, or other adventurous visitors there is reason to believe that phthisis does not exist. Dr. Livingstone and other African travelers have given me the most positive assurances on this point.

The idea that phthisis is a self-propogated zymotic disease, and that all the leading phenomena of its distribution may be explained, by supposing that it is disseminated through society by specific germs contained in the tuberculous matter cast off by persons already suffering from the disease, first came into the mind, unbidden, so to speak, while I was walking on the Observatory hill at Clifton, in the second week of August, 1856. The close analogy in many quite fundamental points between this disease and typhoid fever had often impressed itself on me with very great force, while I was engaged in the study of the latter, and in the preparation of the papers I have published on it. I now saw with a clearness, which had never occurred to me before, that, with the exception of the qualifications necessary for their application to a chronic disease—for the most part of slow evolution and indefinite duration—the leading conclusions to which I have been led respecting the propagation of the fever, might be applied with the same strictness to phthisis also.

This idea had no sooner taken possession of my mind than considerations of great force, and in overwhelming number, crowded upon me in illustration of it.

In the course of the same evening I drew up some notes on the subject, and before the end of the month my views upon it had taken, in outline, the exact shape which they now have. The long interval which has occurred between the summer of 1856 and the present date has been occupied in collecting data, bearing on the various questions raised by this new theory—in accumulating evidence of various kinds, and in examining and carefully weighing difficulties. During the whole of this long time, the subject has scarcely ever been absent from my mind. The result has been only to confirm me more and more in the truth of my first conclusions. I earnestly hope that they will not be lightly rejected. At any rate, I can say that they have not been brought forward in haste or without due deliberation. I have, in fact, considerably exceeded the ten years, which, with a fine sense of what is due to such an enterprise, the Roman poet prescribed as the time to be given to every composition intended by the writer to endure.

Many causes have helped to prevent me from giving my views on this subject sooner to the world. Chief among them I may name want of time to put them into that scientific form, and clear logical order, under which alone an innovation so daring has any chance of being entertained, much more of being accepted, by the profession. This task, however, I hope to complete in the course of a few months. Meanwhile I have thought it well to place this memorandum, by way of record, in the hands of a friend, to be made public at any moment should occasion seem to require it.

Manor House, Clifton, Dec. 1st, 1866.

[*Western Journal of Medicine.*]

Phosphate of Soda in Diarrhœa.

DR. WILLIAM STEPHENSON, Extra Physician to the Royal Hospital for Sick Children, reports in the *Edinburgh Journal* his success in using phosphate of soda in small doses in intestinal trouble. After a report of several cases, including jaundice, diarrhœa, dyspepsia, etc., he concludes:

"In the selection of cases I have now given, I trust I have shown that in this simple, inexpensive and easily administered

medicine, we have a remedy of much value. It may be given continuously to the youngest and most delicate children with perfect safety; and in so prescribing it, we are giving a salt of the greatest importance to the general economy when absorbed. It promotes a healthy secretion of bile, and of itself can aid in the assimilation of fatty matter. In regarding the cases where it is indicated, one can not but be struck by the similarity which exists between its action and that often sought by the administration of gray powder 'in alterative doses.' As a rule for its prescription, I am in the habit of telling my students that whenever their minds suggest the ordering of hydrargyrum c. creta as an alterative, they should try first the phosphate of soda. The advantage of the latter over the former, where it has to be continued for some time, is patent to every one. Where the purgative effect, however, is desired, the former is to be preferred. I hope, therefore, that soon the use of the phosphate will displace in many cases the frequent and often long-continued use of the dangerous remedy.

"The cases in which I now recommend it are chiefly the following:

"In infants who are being artificially reared, and who are liable to frequent derangement of the bowels; also when the phosphatic elements in the food seem deficient, or when articles of food rich in phosphates, such as oat-meal, disagree; where, from the character of the motions, there is a deficient or defective secretion of bile. It is thus of service in cases of chalky stools or white fluid motions. I have also found it of service in many cases of green stools. In diarrhœa, generally, it is more difficult to distinguish the class of cases. In simple diarrhœa, such as we frequently meet with in the summer months, I have not found it of much service alone, although it may be of use when given in combination with other remedies. It is chiefly in that class of cases which are more properly termed duodenal dyspepsia that it is of benefit. Diarrhea after weaning is generally of this nature, and the cases are often chronic, or of some weeks' standing, the mother generally having exhausted her own and the nearest druggist's resources before applying for advice. It is also of service in some cases where the diarrhea is due to some general cachexia."

He also uses it with adults in some cases of constipation, and

in cases of duodenal dyspepsia. He likens its action in phthisis to that of the hypophosphites of soda.

The dose for children is four to ten grains in the food, for adults twenty to forty grains in water, and taken after meals. Too small doses fail of their action.

Diphtheria.

DR. REUBEN SEARCY, of Alabama, thus speaks of his experience in the treatment of this disease: I now treat it with a saturated solution of chlorate of potash, acidulated with muriatic acid; *i. e.*, one hundred grains of the potash, in four ounces of water, adding one drachm of muriatic acid. To a child of ten years old, give a teaspoonful every two hours, in sweetened water, and less to younger children. I directed two pieces of fat bacon to be sewed to a piece of cloth, and bound to the neck over the tonsils, and to be worn until after convalescence. When the skin is hot and dry, rub the patient all over with a piece of bacon rind, then wash off with warm water and soap. This always lessens fever, producing sleep and perspiration. This should be repeated as often as the hot skin requires. Gentle aperients, gruels, teas, etc., should be directed, but an active purgative or emetic should never be used.—*Atlanta Medical and Surgical Jour.*

Prevention of Chloroform Sickness.

It seems that the plan of administering a few drops of chloroform in water to prevent sickness, proposed by Mr. Cheshire, has been tried by Mr. J. Vose Solomon, of the Birmingham Eye Hospital, and others, and has been abandoned. He says (*British Medical Journal:*) "The results of this practice, as observed by me at the Birmingham Eye Hospital, may be briefly summed up as follows: Where the patient had not been specially prepared for the inhalation, the whole contents of the stomach were rejected; where the precaution of allowing only a small breakfast of tea and toast at an early hour in the morning had been taken, some were sick, and some were exempt from that troublesome complication. There was no certainty. The prevention of sickness and retching during and after inhalation of chloroform, I find best attained, in private practice, by obliging the patient to breakfast, four or five hours before operation, upon

the lean of a small, well-cooked mutton chop, four ounces of tea or coffee, and a bit of toast. In persons of highly-nervous temperament, or whose hearts are feeble, the administration of three ounces of hot brandy and water twenty minutes prior to commencement of inhalation, facilitates the action of the anæsthetic, prevents gastric disturbance, and insures satisfactory cardiac action. If the patient be kept entirely without food, or permitted to take only a cup of tea and a little toast for the early morning meal, retching of distressing urgency has been frequently observed. When the patient is much excited by the thought of the contemplated surgical procedure, the process of digestion becomes arrested, and food in a crude state is discharged by emesis.

Bromide of Potassium in Cases of Mania.

DR. THOMPSON, of Dalkeith, states that a patient of his who had suffered from puerperal mania, after her first confinement, recovered under opium; after her second confinement she became *chronically* insane, and recovered only when removed to an asylum for three months. When pregnant for the third time (second month) she became again insane, and recovered in a few days while taking scrupule doses of bromide of potassium frequently, sleep being procured only after still fuller doses at bed-time. He adds that he has had lately a case of acute mania in a male where opium did good, but where the bromide seemed to be much more useful. Although the patient improved under the latter medicine, he ultimately succumbed to the disease. He had only in one other case seen such obstinate refusal of food—every effort to get food over being followed by great exhaustion. He recommends the bromide in mania, especially where opium was no longer advisable, or indeed admissable, *i. e.*, where there was a weak circulation and clammy perspiration. He admitted that in this last condition, in certain other diseases, opium was a valuable stimulant, but here it was the *reverse*.

Dr. Keiller had used this drug largely as a calmative, and had found it of very great service in delirium tremens and other cases in which wakefulness was a predominant symptom.

Dr. Charles Bell thought that there was some misunderstanding as to what might be called a large dose of bromide of potassium—the doses varying from five grains to an ounce. Dr. Begbie spoke of half-drachm doses, he believed.

Sir James Simpson said some patients of his would as soon think of giving up their breakfast as their bromide while laboring under fibroid tumors. He agreed that its action should be watched, for although fifteen years had elapsed since it was known, still there was room for inquiry.

Dr. Burn commended its use in fifteen-grain doses three times a day.—*Proceedings of Edinburgh Obstetrical Society*.—*American Journal of Insanity*.

[Dr. W. E. Brickell and myself gave a patient suffering from delirium tremens, seven ounces of bromide of potassium in thirty hours, without any sensible effect that I could notice.]—J. D. B.—*New Orleans Journal of Medicine*.

Permanganate of Potash in Acute Rheumatism: By C. M. Fenn,
M. D., of San Francisco.

AN extract from a clinical lecture, delivered by Dr. James F. Duncan, at the Adelaide Hospital, some time ago directed my attention to the use, among other remedies, of permanganate of potash in the treatment of rheumatism. I promised myself to make trial of the remedy at the first opportunity. Regarding the so-called chemical theory of the etiology and pathology of rheumatism as, at least, the most plausible, and believing the efficacy of other salts of potash in that disease to be largely due to the measure of oxygen which they contain, it seemed to me that in this salt we possessed a remedy admirably adapted to meet all the indications; and that from the fact of its containing so large a proportion of oxygen (KO , $Mn O$) and holding the same in such loose affinity, we should be enabled most speedily to promote the transformation of lactic into carbonic acid. In apparent corroboration of this view, I append the record of three cases.

Case 1. Mr. S., salesman, aged, thirty, after some unusual exposure was prostrated by a severe attack of rheumatism. Upon an examination of his case the new remedy occurred to my mind. But the urgency of his symptoms was such that it seemed preferable to make use of the medicines we had some confidence in rather than fly to others we know not of. He was, therefore, ordered a preparation of potass, iodide., vin. colch. sem., etc., and submitted to a hypodermic injection of morph. acetas. one-fourth of a grain. To modify the exhausting and troublesome perspiration, he used, on the third day, a vinegar bath, with no appreci-

able relief. On the fourth day, discovering no change in his condition, other than might be ascribed to the daily hypodermic injections, I requested him to suspend the mixture and have half a grain of the permanganate, three times a day. At my next visit, on the following evening, I was surprised at the marked abatement of all the symptoms. The tongue was quite clean, the perspiration no longer excessive nor disagreeable, and the pains were so far relieved as almost to preclude the continuance of an anodyne. His convalescence was now constant and rapid, and on the tenth day from the commencement of the attack he was again at his post.

Case 2. Mrs. G., aged thirty-five, of full habit and previously healthy, was attacked during the passage from New York. There had been a considerable amelioration of the more violent symptoms at the time of her arrival here; but some of the larger joints were still tumid and painful. The permanganate of potash was resorted to, and in a few days she was able to attend to her household duties.

The third case I regarded as, in some sense, a crucial test of the remedy. The patient, a man in middle life, had long been a victim distorted with tophaceous deposits, and the malady was so far incurable. This was varied, however, at intervals of two or three months with acute attacks, which apparently resisted all the usual remedies, and expended their force in from two or three weeks. I had previously attended him in several of these attacks, and found the common remedies, colchicum, acetate of potash in larger doses, etc., of but little avail. I now put him on the permanganate, and had the pleasure of seeing him on the street in seven days.

I find the raspberry syrup to be the best menstruum, as it disguises the somewhat nauseous taste of the medicine completely.
—*Detroit Review.—St. Louis Medical Reporter.*

Delirium Tremens Treated with Cannabis Indica.

DR. BEDOE, physician to the Bristol Royal Infirmary, advises, in the treatment of *mania-a-potu*, the employment of the cannabis indica. He usually begins with a grain of good extract or twenty minims of the tincture; waits from four to six hours, and then, if the patient be awake, gives a double dose. If this also prove fruitless, six hours later he gives three or even four

grains; then allows six or eight hours to pass, and, if necessary, tries a yet larger dose. Longer intervals are obviously needful for extract than for tincture. In one case Dr. B. gave as much as six grains before the patient began to sleep. Along with the remedy he is accustomed to give as much soup, milk and other digestable food as the patient's stomach will bear, and says that cannabis does not injure the appetite as does opium. He rarely gives alcoholic stimulants unless the pulse gives unmistakable evidence of its propriety.—*Medical Record.*

OBSTETRICS.

On the Induction of Premature Labor by Injection to the Fundus of the Uterus.

PROF. LAZAREWITCH, of Charkoff, Russia, read a paper on the above subject before the Obstetrical Society of London, the following brief abstract of which we find in the *London Lancet*:

“The author first described the various modes in use for the artificial induction of labor, and showed how their action was limited either to the parts remote from the uterus or to the vagina, or to the cervix or cavity of the uterus. He laid down the proposition that the nearer the irritation is to the fundus uteri, the more sure and speedy is the result; and, *vice versa*, the nearer it is to the orifice of the uterus, the more violent and protracted will be the resulting action. The grounds of this opinion were fully detailed, and proofs given from the practice of the methods before referred to. The physiology of parturition was considered at some length, with the view of demonstrating that the first step in labor is the separation of the membranes from the uterus; in consequence of this the ovum becomes, as it were, a foreign body, and the uterus begins at once to contract in order to effect its expulsion. Such being the *role* in natural labor, the author contended that our efforts in the artificial induction of it should aim at imitating this process, and such, he stated, was the effect of his method. Several circumstances appeared to prove that the fundus uteri was much more sensitive than the rest of the organ, and hence the inference that to that situation attempts should be made to excite it to action when labor is required. The author next gives a description of the instrument which he uses for this purpose. It consists of a glass syringe, graduated to a fluid measure, and

capable of holding about eight ounces of water; the piston being in the form of a double screw, so elongated as readily to work up and down by mere pressure or traction. To the end of the syringe is attached a soft, flexible, metallic tube, about six or eight inches long, which is intended to reach the fundus uteri. This tube is first placed *in situ*. The syringe is then filled and fixed to the tube, great care being taken to secure the exclusion of air from every part of the instrument. When all is ready, the piston is slowly pushed down, and the fluid is injected up to the fundus uteri. Twelve cases were given in great length by the author, and the conclusions derived therefrom were, that in all uterine action was set up, two only requiring a second injection to increase the labor pains. The fluid used was warm water at 28°B. The quantity used was, in four cases six ounces; in one, five ounces; and the remaining seven, four ounces. In all but one case, labor pains began immediately, and continued until it was completed, in from three and a half to thirty-six hours, the mean duration being nineteen hours from the time of injection. In one case only death occurred, and that was in no way due to the operation. Nine of the children were born alive; one was still-born, and two died before the operation. Labor was induced for various reasons, and in all the cases the aim of the operator was wholly or partially attained. In the majority of cases no other preliminary measures were adopted beyond attending to the bowels."

Chronic Metritis—Prof. Scanzoni's Treatment.

PROF. SCANZONI, of Wurtzburg, has never obtained any good effects from anything but the iodide of potassium, and the iodo-chloride of mercury in direct application to the uterine and vaginal mucous membranes.

He uses, for instance, a liniment containing one drachm of iodide of potassium to one ounce of glycerine, and places every night in the vagina a sponge impregnated with this fluid. The sponge is removed in the morning. This, he says, is the only method of iodine dressing which has ever been found capable of reducing, in the course of two or three weeks, the size and induration of the inferior segment of the womb, and is infinitely preferable to the application of tincture of iodine and of iodized liniments to the inguinal regions.

Scanzoni has more recently had recourse in the same manner to the introduction into the vagina of the following pomade : Hydrarg. iodo-chloridi, gr. v.; Adipis, ʒj. After each application of the remedy, which requires the assistance of the speculum, the patient should keep her bed for six or eight hours.

The sponge may then be extracted, and an injection of tepid water should be performed. The epithelium is in general destroyed in the parts which have come into contact with the ointment; exudation follows, and marked decrease of size of cervix. The application may be repeated several times, if necessary, at intervals of ten days or a fortnight.

Scanzoni has completely relinquished the practice of applying tincture of iodine to the vagina or cervix. When excoriations are present, he prefers to all other local remedies rectified pyrolyogenous acid, pure or mixed with equal parts of creasote. He leaves these modifiers in contact with the ulcerated surfaces, until the sanguineous oozing has ceased, and until the part, which is in general of a bright red, has acquired a dead white color.—*Chicago Medical Examiner*, from *Journal of Practical Medicine and Surgery*.

MATERIA MEDICA.

Capsicum in Delirium Tremens.

DIGITALIS in large doses, so lately vaunted as a remedy for delirium tremens, has failed to receive the confidence of the profession, and now capsicum appears to be taking its place. A bolus of thirty grains was given in one case, and caused slight burning in the mouth and throat for a time, but no serious inconvenience, and in less than an hour the patient fell into a sound sleep, from which he awoke three or four hours later in a state of convalescence. In the Melville Hospital seventy or eighty cases were successfully treated with this remedy in single or repeated doses, ranging from twenty to eighty grains. Twenty years ago, during the "Washingtonian" temperance excitement in Philadelphia, it was a common practice for the reform drunkards to get hold of all cases of delirium tremens which they could find, and "cure" them with capsicum administered in good beef or mutton soup. We can bear testimony to the eminent success of the treatment. The broth, red with pepper, was poured in lav-

ishly, the tolerance of the stomach being the only limit, and nothing else was suffered to pass the lips. The cure was prompt and complete, without prostration. Almost any treatment, however, will cure this disease, terrible as are its manifestations, provided the patient be not killed in the effort to save him. The worst cases are those in which the stomach rejects everything, nutriment and medicine—in fact, when gastritis exists. Here cupping or leeching to the epigastrium, followed by a large blister, will sometimes save life. For internal medication in such cases, the rectum, of course, is not to be overlooked.

The Treatment of Infantile Diarrhœa.

DR. BUIZ (*Jour. Pract. Med. and Surg.*) expresses the following opinions, as the results of his experience, on this subject: "1. The diarrhœa of spoon-fed infants generally yields to the addition of a small quantity of bi-carbonate of soda or of lime water to the milk. 2. In summer-diarrhœa, supervening without any tangible cause, from one sixth to one-quarter of a grain of calomel three or four times a day, associated with an equal amount of ipecacuanha, will often be found efficacious. If the indisposition is consequent on exposure to cold, minute doses of opium are appropriate. 3. Chronic diarrhœa resulting from various causes may, in most cases, be checked with nitrate of silver, one-sixth of a grain of which may be exhibited without risk. This remedy is sometimes, however, rejected by the stomach, and should then be replaced by tonics and vegetable astringents. 4. Diarrhœa combined with anæmia and impaired nutrition, is often the result of a state of decomposition of the blood, for which the best remedy is the proto-iodide of iron. In such cases bismuth is frequently unavailing; whereas in doses of half a dram three times a day, it is invariably successful against intestinal relaxations referable to tubercular ulceration. The causes of intestinal catarrh are, however, so obscure, that in many instances the treatment must be empirical."

WE take the following from a letter of Dr. Yandall, Jr., of Louisville, to the *Richmond Medical Examiner*:

"In reply to a question as to the relative merits of Cephalotripsy and the Cæsarian section, Prof. Simpson remarked, that were the child dead he should have no hesitation about resorting

to the cephalotribe, but that if the child was living he should hesitate a long time before using this instrument, for it was a grave matter to decide upon the taking of human life. He rather inclined to the belief that if a woman with a deformed pelvis would go on putting herself in the way of becoming pregnant, she ought to be made to take the risks of the Cæsarian operation, rather than be encouraged in her course by sacrificing the life of her child.

Prof. Simpson uses chloroform in all cases of labor, whether difficult or simple, laying down the rule, which he insists is a golden one, that it is to be given during the continuance of the pains, and omitted in the intervals. Administered in this way, it hastens the labor, and no evil ever results from its application. It does not predispose to hemorrhage, nor to perpetual convulsions, but on the contrary, tends to ward these off, and when they occur is the most efficient remedy for them. In giving it to his patients he employs a simple napkin or towel, having discarded all the various inhalers proposed for its superadministration. He does not measure the quantity, but continues to give it until anaesthesia is induced. He insists upon perfect quiet as of vital importance in the lying-in chamber; and he contends, with great reason, that the recumbent posture should always be assumed where chloroform is inhaled, whether by direction of the surgeon, the obstetrician, or the dentist. Going beyond his own department in which his authority is so high, Sir James asserts that chloroform is the best of all remedies for an incipient catarrh, especially by doctors, who are so averse to taking medicine; and that it is also one of the most efficient of Collyria. In catarrh, you pour a little of the fluid into the palm of the hand and inhale the vapor, and in ophthalmia you bring the vapor in contact with the eye. Returning to the use of anaesthetics in midwifery, he expressed himself in words to the following effect: "A man who should whip a poor sick woman with a cat-of-nine tails would be considered exceedingly cruel, and would probably be punished by law for his cruelty. The act would merit some punishment, but he rather thought that the accoucheur who permitted his patients to suffer the cruel pangs of childbirth, at this day, was guilty of a sin of omission almost as heinous. So safe has chloroform come to be considered in Edinburg, that the nurses and old women administer it, and Sir James usually finds his patients under its influence when he arrives at their bedsides.

It is the belief of this sanguine discoverer that in half a century or a hundred years, the profession will have learned how to administer all our remedies in the form of vapors. He spoke in high terms of praise of the oil of juniper as a diuretic inhaled in that form. He puts a spoonful of the oil into a vessel of hot water and directs the patient to breathe the steam.

Dr. Henry Bennett gives his testimony in favor of chloroform in midwifery. He believes that if it were the law of nature that husbands should take turn about with their wives in bearing children, the men would become all at once violent advocates of anæsthetics. I may remark that chloroform seemed to have no enemies in the British Medical Association. Prof. Simpson asserts that it never stupefies or otherwise injures the child, as is sometimes done by sulphuric ether. This eminent man was the master spirit of the association, and is, without question, the foremost medical man of all the world. He is the most attractive and amusing speaker to whom I have ever listened on scientific subjects. His language is always chaste, perspicuous and elegant, and he gives you kernels of wisdom coated with sugar, and shows up his stores of knowledge flavored with the most delightful wit and humor. He is a philosopher of the highest order, but a jolly one, who makes you laugh while you learn. I am strongly tempted to give you some of the most amusing anecdotes with which he illustrated his opinions, but my letter is already so long that I must abstain. Next to Sir J. Y. Simpson, Prof. Pirrie was the best speaker whom I heard in the association. Both speak with a broad Scotch accent.

Incompatibility of Pot. Iodid. and Potass Chlorat.

THIS is an important point in practice, for in syphilis, to act at the same time upon the ulceration of the mouth and the general malady, chlora. potass. and pot iodid. are frequently given. This practice is dangerous, as has been demonstrated by M. Vee; for the chlorate of potash, absorbed simultaneously, with the iodide of potassium, may part with its oxygen, and transform into the iodate, a poisonous agent. The recent experience of M. Melsens proves the possibility of this transformation.

This ought to suffice to prevent, were it only as a precautionary measure, the simultaneous administration of the chlorate of potash and the iodide of potassium,—*Gazette Medicale.*

SURGICAL.

The Ligature and Mr. Syme.

MR. SYME has bid adieu to the use of the ligature, save in the tying of the larger arteries. He employs torsion; and after this operation is completed, he clears out the wound, using a weak solution of carbolic acid and water (one part to thirty,) and covers the whole over with a paste containing carbolic acid, chalk and other ingredient.

Reviews and Notices of Books.

On the Signs and Diseases of Pregnancy. By THOMAS HAWKES TANNER, M. D., F. L. S., Member of the Royal College of Physicians, etc. From the Second and Enlarged London Edition, with Four Colored Plates, and Illustrations on Wood. Philadelphia: H. C. Lea, 1868.

This is a most excellent book; with all the system of a regular text book, it has the fascination of a clinical lecture. With a running text of the author's views, there is at the same time abundantly interspersed a narrative of cases illustrative of the doctrines presented. As we learn from the author's preface, "the first edition of this work was published in 1860." This new edition comes to us therefore freighted with the author's extended observations and experience for seven years, confirming or modifying the views and principles presented seven years ago.

Dr. Tanner, after an introductory chapter containing a great deal of important information, treats of the following topics. Signs of Pregnancy, Diseases which Simulate Pregnancy, Duration of Pregnancy, Premature Expulsion of the Fœtus, Extra Uterine Gestation, Superfœtation, Diseases which may co-exist with Pregnancy, and their reciprocal influence, Sympathetic disorders of Pregnancy, Diseases of the Urinary and Generative Organs, Displacements of the Gravid Uterus. All of these are important, many gravely so, and the practitioner will be glad to read an author so pleasant in his style and so instructive. For sale by Robert Clarke & Co. Price, \$4 25.

Obstetric Clinic. A practical contribution to the study of Obstetrics and Diseases of Women and Children. By GEO. T. ELLIOT, JR., A. M. M. D., Professor of Diseases of Women and Children in the Bellevue Hospital Medical College; Physician to Bellevue Hospital and to the New York Lying-in-Asylum, etc. New York: D. Appleton & Co., 443 & 445 Broadway, 1868, pp. 468.

This work is formed from clinical observations made on cases occurring in Bellevue Hospital during the last year, and intended to illustrate the views of the author thereon. The style and phraseology of lectures follows the delineation and history of the cases. The book has the freshness of hospital practice throughout, in reference to diagnosis, pathology, therapeutical and operative proceedings. It is a contribution in partial discharge of the debt due the profession from those who have the advantages of controlling hospitals, when observations can be made on a large scale. It will be found to possess a great amount of valuable information on the department of obstetrics in an attractive and easy style, according to the most modern and improved views of the profession.

G. M.

Annual Abstract of Therapeutics, Materia Medica, Pharmacy and Toxicology, for 1867. By A. BOUCHARDAT, Professor of Hygiene to the Faculty of Medicine, at Paris, etc. Translated and Edited by M. J. De Rosset, M. D., Adjunct Professor of Chemistry, University of Maryland. Philadelphia: Lindsay & Blakiston, 1868.

We have a number of invaluable abstracts presented to the profession. Braithwaite, Rankin, etc., besides the most excellent condensed summaries which are a feature of many of our journals of medicine. Bouchardat, devoted more especially to a particular field, is nevertheless a most practical epitome, and we are very glad that we are now to have it regularly translated for the English reader. We find very excellent articles arranged under the head of Narcotics, Anæsthetic, Antispasmodics, Stimulants, Evacuants, Diuretics, etc., Chapters of General Therapeutics, Gravel, Calculi and Gout. We certainly hope this annual abstract will at once take its place as one of the necessary features of our standard literature. For sale by Robert Clarke & Co Price, \$1 75.

The Principles and Practice of Obstetrics. By GUNNING S. BEDFORD, M. D., Professor of Obstetrics and the Diseases of Women and Children in the University of New York, etc. Fourth Edition, carefully revised throughout and enlarged. New York: Wm. Wood & Co, 1868.

Upon the first appearance of Bedford's *Obstetrics*, we had occasion to express our gratification with its many excellencies, and to most heartily commend it to students for its perspicuous style, and to practitioners as a satisfactory and readable work of reference. A frequent familiarity with our author for several years, has abundantly confirmed our first favorable impressions, so that we now advise our friends to purchase this work as one of the most satisfactory text books in this department of our profession. The frequent editions of Dr. Bedford's works are sufficient evidence that the profession at large has a like appreciation of their worth.

In preparing this fourth edition for the reader, it seems not only to have received a thorough revision, but to have had several important additions; thus we notice a consideration of some of the more important complications of pregnancy, as chorea, jaundice, etc., with a more careful review of anaesthetics, as applied to obstetrical practice, twin pregnancy and other topics of interest.

The general execution of the work is good, and we are sure the obstetrical student will thank us for advising the purchase and study of Bedford.

Spermatorrhœa. Its Causes, Symptomology, Pathology, Diagnosis, Prognosis and Treatment. By ROBERTS BARTHOLOW, M. D. A. M., Professor of *Materia Medica*, etc., in the Medical College of Ohio, etc. Second Edition. Revised and Augmented. New York: Wm. Wood & Co, 1867.

This little book has met with decided favor at the hands of the journals and the profession, and we are pleased to see that a demand is made so soon for a new edition. Having so recently noticed this book, it seems scarcely necessary at present to speak more fully of its plan or merits. It discusses the various topics indicated in the title page with sufficient fullness; and we begin to have a hope that this vexatious disease is about to be taken from the hands of quacks and subjected to legitimate and rational treatment. For sale by Robert Clarke & Co. Price, \$1.

A Practical Treatise on the Diseases of Children. By D. FRANCIS CONDIE, M. D. Sixth Edition, Revised and Enlarged. Philadelphia: Henry C. Lea, 1868.

Dr. Condie is one of the most industrious of American medical authors, and his work on the Diseases of Children is a monument of his careful pains taking scholarship. But when a standard text book has passed to its sixth edition, we may safely say that the class of readers and students for whom it is intended, has placed it beyond the bounds of criticism. Every work which has for its aim the better understanding and management of the ailments of childhood, is an important contribution to our resources. Such a work undoubtedly is afforded in Dr. Condie's book. The voice of the profession has already determined this point and we only repeat the award of the jury. The present edition appears to have received the author's careful supervision, and everything new and valuable in the way of pathology and therapeutics is incorporated. For sale by Robert Clarke & Co. Price, \$5 25.

The Diagnosis, Pathology and Treatment of Diseases of Women, including the Diagnosis of Pregnancy. By GRAILY HEWITT, M. D., Lond. F. R. C. P. Professor of Midwifery and Diseases of Women, University College, etc. First American, from the Second London Edition, Revised and Enlarged, with one hundred and sixteen Illustrations. Philadelphia: Lindsay & Blakiston, 1868.

The present is the first American edition of a work already well known to the English members of the profession. It was originally founded on a course of lectures delivered at St. Mary's Hospital Medical School, by Dr. Graily Hewitt. A very considerable portion of the work is devoted to the diagnosis of those diseases which are peculiar to women, while the latter part is occupied in the consideration of their treatment. At first thought this arrangement does not seem the best adapted to secure an instructive book, but our author evidently seeks to make the diagnostic feature of his instructions peculiarly prominent, and very justly remarks upon the great and special importance of a correct diagnosis in the management of the diseases under consideration.

We have, therefore, very clear and expressive chapters, first upon the data to be obtained without a physical examination;

thus the age of the patient, her sexual relations, the character of menstrual and other discharges, etc. Then we have other chapters upon the mode of conducting examinations by manual and digital exploration, the sound, the speculum, etc., and the various information which is to be derived from these various sources. Part second presents the pathology and therapeutics of the principal diseases to which women are liable.

Dr. Graily Hewitt is good obstetrical authority, and we think he has given us a valuable book; one that from its arrangement, style and suggestions, will be acceptable to the American profession. For sale by Robert Clarke & Co. Price, \$6.

Eighth Annual Report of the Board of Directors and Officers of the Longview Asylum, to the Governor of the State of Ohio, for the year 1867.

THE report of Longview, for the year 1867, is as full of interest as any one preceding it. Too many in the profession are in the habit of giving a glance at the reports of asylums, with no other view than the gratification of curiosity. This report furnishes abundant material for sober reflection and observation. Dr. Langdon, the able superintendent, who has been in charge of the institution since its opening, has lost none of his enthusiasm in the work to which he has so arduously and successfully devoted himself. At the close of the year 1866, three hundred and eighty-eight patients remained in the asylum; of which one hundred and ninety-five were males, and one hundred and ninety-three were females. During the year 1867, ninety-two males and one hundred and five females were admitted. During the year one hundred and twenty-three were discharged cured; thirty-seven males and sixty-six females.

The percentage of cures on admission was fifty-four; and the doctor reminds us that in ninety-one of all admitted during the year, the duration of the insanity had been more than a year, and in some cases extending to twenty-five years. The ratio of mortality is slightly greater than that of last year, and is explained by a change in the law, admitting into the asylum "a large number of old, feeble, demented, idiotic and epileptic cases of many years standing." We can not avoid quoting in full the language of the report on this point; "a great many of these were perfectly quiet and harmless, some, indeed, only suffering from the infirmities of age." It can be very readily understood

how such a class of patients would swell the ratio of mortality, as diseases of a low debilitating character especially attack them. At the last session of the Legislature, the law was so changed as to allow any insane person who has resided a year in the county, admission into the asylum. The other State asylums send away the old, incurable, demented, idiotic and epileptic, who are finding their way to Hamilton County, and gaining a residence, are admitted to Longview. Dr. Langdon very justly complains of this, and calls attention to the fact that the asylum was built by the people of Cincinnati and Hamilton County, for the curable and incurable of the city and county, and should be reserved only for the treatment of the citizens of the county and city. This is only a matter of simple justice, so long as the expenses of the institution are borne by the citizens of the county. Another view of the matter is that no long time will elapse before the asylum will be so filled with the incurables of other counties of the State, that neither the curable or incurable cases belonging to Hamilton County will be able to gain admission. Indeed, the time may soon come when the people of Hamilton County will find themselves taxed to take care of the incurables from every part of the State to the exclusion of their own.

The greatest number of patients at any one time during the year was four hundred and forty-one, and the smallest number three hundred and eighty-nine. The males and females were nearly equal in numbers, there being two hundred and twenty-three males and two hundred and twenty-one females. The number of pay patients has been less than the previous year, owing to the want of room.

In this connection we can not omit calling attention to the want of a private asylum. A good private asylum under proper management, would not only be of great benefit, but would also afford a good revenue. Each patient has been treated at an expense of five dollars and twenty-seven cents a week. Dr. Langdon calls on the charitable for contributions of newspapers, books and engravings, which are greatly enjoyed by the poor unfortunate patients. The report contains several interesting tables, valuable for study to the physician and student of political economy. Longview Asylum is a noble institution, and conducted as it is by Dr. Langdon, with such eminent ability, is an honor to the city and county.

Business Notices and Acknowledgments.

NEW BOOKS.

- Bedford*—Principles and Practice of Obstetrics. Wm. Wood & Co
Thomas—Diseases of Women. Henry C. Lea.
Hewitt—Diseases of Women. Lindsay & Blakiston.
Bouchardat—Annual Abstract of Therapeutics. Lindsay & Blakiston.
Bartholow—Spermatorrhœa. Wm. Wood & Co.
Bauer—Orthopoedic Surgery. Wm. Wood & Co.
Cullerier by Bumstead—Atlas of Venereal Diseases. H. C. Lea.
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THE Secretary, Dr. Waterman, desires us to remind our friends in Indiana, that the Indiana State Medical Society will meet at Indianapolis, Tuesday, May 19th.

PALMER'S ARTIFICIAL LEG.—We desire to sell an order for one of Palmer's Artificial Legs, and will be pleased to communicate with any person interested.

FOR SALE.—One of the best county locations for a physician in Ohio. Improvements consisting of a two story brick house, thirty-five by forty feet; barn, carriage house, corn-crib and other out-buildings, and two lots of ground, all in good repair, for \$1,200; \$400 to remain in property if desired. Immediate possession. Address,

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NOTE—SPECIALTY.—Laryngoscopy and Diseases of the Air-passages by the German method. Dr. H. also examines candidates for admission into the Army Medical Staff.

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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Original Communications.

ART. I.—*Amputation at the Hip Joint.*

By JOHN WRIGHT, Clinton, Illinois.

JOHN W. SPRADLING, aged twenty-seven, a private in Company A, Thirty-Third Regiment, Illinois Volunteers, was wounded May 17th, 1863. The wound was a large flesh wound situated in the right lumbar region. After receiving it, he was sent to the Jackson Hospital, in Memphis, Tenn., and while there his left hip became sore from laying on it (a bed sore,) which was attacked by hospital gangrene, resulting in the destruction of the soft tissues and injuring the upper portion of the femur. After a time the sloughing process ceased, and the wound, thus made, partially healed, leaving several fistulous openings communicating with the femur. Different medical men have seen and treated the case, using all the ordinary stimulating injections together with appropriate constitutional treatment, but all to no avail, in consequence of the diseased condition of the upper portion of the femur.

I was called to see the case in November, 1866, and requested to treat it, but declined to do so, as the man would not, at that time, consent to have any operation performed, and I thought it useless to try to benefit the case without. In January following, however, he, without persuasion, made up his mind to have an operation performed for the purpose of having the diseased bone removed. He had at that time been laying on his right side for three years, being all or nearly all of that time unable to be

turned over or to sit up. There were at that time these fistulous openings communicating with the femur; one in the groin, and one two inches below the trochanter major, and the other on the posterior aspect of the thigh, and in February another opened just above the trochanter. The hip joint was ankylosed and so was the knee-joint. A nutritious diet, stimulants and tonics, were given to improve his general health and prepare him for the operation.

About the middle of February I invited Dr. C. Goodbrake to see the patient with me. After Dr. Goodbrake had examined the case, I stated to him what I proposed to do, which was to make an explorative incision in order to examine the condition of the bone, and that if the diseased bone could be removed with a prospect of success to remove it, and if it could not that I then proposed to amputate at the hip-joint. Dr. Goodbrake thought the operation justifiable, under the circumstances, as a last resort.

Feb. 20, 1867. Amputated at the hip-joint to-day, assisted by Drs. C. Goodbrake, T. K. Edmiston, W. W. Adams, J. A. Edmiston and D. W. Edmiston. The operation being sanctioned by all of the physicians present, though some of them thought he would not be able to stand the operation. The method of operating was the oval, or that of Guthrie. Chloroform was administered by Dr. D. W. Edmiston; Dr. Goodbrake compressed the femoral artery, Dr. J. A. Edmiston stood on the outside of the limb to compress the arteries in the posterior flap; Dr. Adams held the limb, and Dr. T. K. Edmiston stood in readiness to assist in the compression of the femoral artery, which, on account of the flexed condition of the limb, was difficult to get at. Each assistant performed his part well, and the operation was got through with in reasonable time and with the loss of but little blood. The patient came out from under the influence of the chloroform and reacted nicely. Hot brandy and water were given freely as soon as he could swallow. He also took a cup of strong coffee, and in about an hour after the operation, half a drachm of laudanum was administered. The wound was closed with five sutures, with adhesive straps between to support them, and a piece of lint moistened with warm water was laid over the stump, which constituted the first dressing.

Feb. 21. Patient slept some last night; has taken about one grain of morphine since the operation, and a pint of brandy with eggs in the form of egg nog; his pulse is one hundred and mod-

erately full; tongue clean and moist, and general appearance pretty good.

Feb. 22. Had a slight chill last night, but no other unfavorable symptoms; pulse one hundred; respiration fifteen; tongue moist and clean. Ordered two grains of quinine three times a day, and a diet of milk punch, egg nog, beef essence or chicken broth as much as the stomach will bear, the choice of articles being left to the patient.

Feb. 23. Condition same as yesterday. Ordered an injection as the bowels have not been moved since the operation; morphine is given to relieve pain, and chlorine to be sprinkled about the bed and on the floor, and the room to be well ventilated by night and by day.

Feb. 24. Symptoms about the same as yesterday; removed some of the sutures to allow a free drain from the wound. There are signs of suppuration, but rather of an unhealthy character, the discharge from the wound being thin and offensive; the bowels not yet moved; the injection to be repeated, which moved the bowels.

Six o'clock P. M. Patient not doing well; is suffering from severe pain in stump; the discharge from the wound thin and offensive; removed nearly all of the sutures, and cleansed the wound with warm water with chlorine in it, and removed, with the syringe, the fluid that could not escape from the upper portion of the wound, in consequence of its depth and from union having taken place in the center of the wound. The wound then dressed with resin cerate containing creosote, and the amount of brandy to be increased to a pint and a half, in the form of egg nog as before.

Feb. 25. Patient rested tolerably well last night; pulse one hundred and twenty; wound looks better; the discharge not so offensive. Treatment continued.

Feb. 26. Pulse one hundred and twelve; tongue moist and clean, and the wound looks much better. Ordered bowels moved by injection.

Feb. 27. Rested well last night; pulse one hundred and twelve; tongue clean; bowels moved freely yesterday; appetite good; wound doing well. Ordered in addition to other treatment, thirty drops tincture iron three times a day.

Feb. 28. Symptoms same as yesterday. No change in treatment.

March 1. About the same as yesterday; one ligature came away this morning. The quinine is withdrawn on account of its producing nausea, otherwise the treatment continued.

March 2. Symptoms same as yesterday. Treatment continued.

March 3. Patient doing well.

March 4. Same as yesterday.

March 5. Doing well; bowels moved every other day without medicine.

March 6. Passed a bad night; could not sleep on account of pain; the wound this morning is covered with blood; the blood is oozing from every portion of the granulating surface. On removing the blood from any point, it is quickly covered again with a soft coagulum; the bowels moved this morning attended with considerable tenesmus, occasioned by piles. Prescribed an ointment of per sulphate of iron and opium for the piles, and cleansed the wound with a solution of alum, having no other astringent at hand, and ordered tincture of iron to be taken freely during the day.

March 7. The wound looks better this morning, only slight oozing. Treatment continued with the addition of ten drops of nitric acid every three hours.

March 8. Patient much better. Treatment continued.

March 9. Still doing well; pulse one hundred and twelve; no change in the treatment.

March 10. Same as yesterday.

March 11. Rested well last night; vomited some last evening, probably from eating too much.

March 12. Pulse one hundred; appetite good; bowels regular; wound looks well.

March 13. Another ligature came away to-day; patient has phthisic; vomited some yesterday; the wound is rather red with a tendency to bleed; the vomiting appears to have something to do with the hemorrhage.

March 14. About the same as yesterday.

March 15. Same as yesterday.

March 16. Wound looks better, but the asthma is no better; vomits occasionally.

March 17. Rested better last night; free from asthma; all medicine left off, except the nitric acid and morphine, when there is pain; still takes a pint of brandy in the twenty-four hours. The

brandy is only taken with meals, the object being to stimulate the stomach rather than the heart.

March 18. No change.

March 19. Patient not quite so well to-day; bowels rather costive, and the appetite not good; the ligature on femoral artery come away this morning. There is still one ligature that has not came away, but it is not attached to an artery; but as it is near the femoral no force is used to remove it.

March 20. The posterior flap is attacked with erysipelas; stump painful, also pain in the back and hips; the granulations too are large and pale. Applied tincture iodine to the stump where there is erysipelas, and touched granulations with nitrate of silver. I also injected a solution of nitrate of silver, ten grains to the ounce, where I could not reach them with the stick, and ordered the brandy and nourishment increased,

March 21. Rested better last night; the erysipelas rather diminishing; solution of nitrate of silver applied to the inflamed surface, and granulations touched with the stick.

March 22. Rested well last night; bowels regular, and appetite better; erysipelas disappearing.

March 23. Patient doing well.

March 24. Doing well; erysipelas gone; pulse one hundred and twelve; tongue moist and clean; the granulations still rather large; is taking no medicine now, except tincture of iron, and when there is pain, morphine.

March 25. Patient appears to be doing well.

March 26. No change.

March 27. Patient has asthma again; prescribed half grain Ext. Belladonna to be taken at night. The wound has been dressed twice a day for thirty days, except the two first, the first dressing not being disturbed until the third day. The wound is now dressed once a day.

March 28. Patient still has asthma; the belladonna does not relieve it.

March 29. Rested better last night; not being much disturbed by the asthma; the wound is filling up.

March 30. The wound about the same as yesterday, but there is rather an unfavorable condition of the system, as is shown in a tendency to dropsical effusion. The appetite too not so good. Prescribed the thirtieth part of a grain of strychnia three times a day; is also to take some cream of tartar as a drink. The

quinine and iron preparations appear to disagree with him, so they have been left off.

March 31. No change in the stump, general symptoms or treatment.

April 1. Symptoms about the same; still has dropsy.

April 2. About the same.

April 3. Rather less swelling; no change in other respects. Ordered five grains of iodide of potassium and ten of bromide three times a day. Patient coughs badly.

April 4. Cough still troublesome.

April 5. Vomited this morning; there is considerable increase in the secretion of the urine. Treatment same.

April 6. Cough a little better; kidneys acting freely; bowels moved every day.

April 7. Phthisic some better; wound looks well; the dropsical effusion disappearing but very slow.

April 8. Bowels moved freely, which has diminished the dropsical effusion. The stump is nearly well. There is now no pain in it, or but very little.

April 9. Patient doing very well; his pulse is now one hundred and four.

April 10. No change in any respect.

April 12. Patient still has phthisic; pulse one hundred and twelve. The wound is almost closed, as are also the two fistulous openings, one being in the groin and the other in the posterior flap, both being at too great a distance from the incision in amputating to be laid open. Pressure is now being applied to the stump with adhesive plasters, and is taking small portions of quinine three times a day.

April 15. The stump this morning does not look well. One of the fistulous openings that had nearly closed has opened, and that part of the wound that was just closing, appears to have melted away, leaving quite a large opening where a few days ago there was sound tissue.

April 17. No material change in the stump. Is now taking tincture of iron freely, and the wound is dressed with stimulating applications, such as sul. zinc. nitrate silver and nitric acid.

April 19. No material change in appearance of the stump. It is found that the opening in the posterior flap communicates with one that has opened in the center of the stump, the distance be-

tween them being about two and a half inches, and nearly as deep as the distance between them.

April 22. Laid open the sinus between the two fistulae and filled the wound with lint smeared with resin cerate.

April 24. Wound dressed as yesterday.

April 27. Wound granulating; appetite improving. Prescribed tartrate of iron and potash, in ten grain doses, three times a day between meals.

May 1. The wound is granulating slowly. The dropsical effusion is now nearly gone, and the asthma too is better.

May 5. No material change in any respect.

May 10. Wound continues to granulate, but very slowly.

May 15. The flap wound is now closed, and the wound made by uniting the two fistulae is granulating.

May 16. The stump looks bad again, a portion at the upper part where the flaps had united has sloughed in depth about two inches and as large round as my thumb. The remaining fistulae are also disposed to slough. Applied nitric acid to the sloughing surfaces, and ordered tincture cinchona and aromatic sulphuric acid internally.

May 20. The nitric acid has been applied to the sloughing surface daily for several days, diluting the acid as the sloughing diminished. To-day the tincture of iron has been applied locally.

May 25. The wound is now granulating nicely. Tincture Cinchona and sul. acid continued internally, and tincture iron is applied locally.

June 1. The stump again has a bad appearance, showing signs of sloughing. The fistulae that were nearly closed have opened again.

June 10. Stump still looks bad; am now using permanganate of potash, twenty grains to the ounce of water, as a local application once a day.

June 15. The sores have improved, and the wound made in amputating is well, with the exception of three small points which are remnants of old fistulae.

June 25. The sores are now nearer well than they have ever been, and the patient's general health is better than it has been for three years.

July 25. The patient has been about the same for the last month.

Sept. 1. There are still some points that are not healed; the discharge from them is very small.

Feb. 20, 1868. I visited the man to-day, this being one year since the operation. I found him tolerably comfortable, about the same as he was five months ago. There are four small points that have not yet closed, one of them probably never will. This one is the one heretofore described as being in the groin. It passes in on the inside of the ilium, and can not be laid open without great danger. The other points are very small and may yet get well. In pleasant weather the man can go out of doors some, but has to be carried, as he has no use of the right leg, occasioned, as I suppose, from laying on it so long, and from the injury occasioned by the original wound in the lumbar region.

The great error, in my judgment, in this case, was in not having the operation performed sooner before his constitution was ruined. His general health at this time is not first rate, but is probably as good as it ever will be, and there is no doubt, in my mind, but what he would have been dead long ago if the limb had not been amputated.

ART. II.—*The Dynamics of Inflammation.—A Study of its Pathology and Therapeutics.*

A paper read before the Muskingum County (Ohio,) Medical Society, February 5, 1868. By Z. C. McELROY, M. D., President.

IN examining the labors of medical and physiological observers in the past on the subject of inflammation, none can withhold a tribute of admiration for their accurate record of appearances, ingenious experiments, and philosophical reasoning concerning the phenomena attending its apparently complex states. It would be safe to say, that had they had the philosophical dogma of continuity to guide them in their investigations, many theories and opinions which have been advanced would never have had any existence.

Inflammation has been defined to be "an altered condition of a part of the body, accompanied by, or resulting in pain, redness, heat, tension and swelling, symptoms which appear in greater or less severity, according to the structure and function of the part."

affected, and its relations to other parts, and the idiosyncrasies of individuals."

And irritation thus: An altered condition of a part of any tissue or organ, commonly manifested by increased circulation and sensibility.

These are modified from the definition of inflammation and irritation, as given in Dunglison's Medical Lexicon. As they stand in the dictionary, they assume that inflammation and irritation are alike exaltations of vital movements. These recite the sensible phenomena, and are as good as can be given in the absence of philosophy. It is my purpose to show you that they manifest not an exaltation, but a lowered grade of organic life in the tissues of man and animals. But first your attention is invited to a few other features of this diseased condition.

Inflammation is nearly always local—that is confined to a part. Never universal, that is, all the tissues and textures of the body affected alike.

The causes are mechanical, as blows and bruises; cuts and solutions of continuity; chemical, as acids, alkalies and salts. Organic poisons, as cantharides, and organic matter in a state of change, as in syphilis, small pox, etc., and sometimes, perhaps, from defective evolution in the ultimate cell structure of all the tissues.

Its varieties are common, rheumatic, erysipelatous, diphtheritic and specific.

Its consequences, exudation, softening, suppuration, ulceration, induration and effusions.

Its terminations, resolution and destruction or mortification.

That the human tissues in health are examples of the highest organization to which organisable organic matter ever attains in the universe, is inferred, perhaps, proven by several facts. One is that any and all changes from health tends to destruction or lower grades of organization.

We are accustomed to speak of inflammation as *high*, because we were taught so by our books, and in the schools. So, again, we speak of it as slow or mild, with a host of qualifying adjectives, as acute, chronic, violent, intense, moderate, low, etc., while in fact this technology sadly befogs the mind in comprehending the actual condition of things, which is a more or less rapid oxidation or destruction of the textures involved. So, viewing inflammation from a philosophical basis, it can only be considered as

a condition of the tissues in which there is a more or less rapid retrograde action to lower forms of organization. It is all the more important that this correct pathological view should ever be present to the mind of those who have to do with inflammation as physicians, because it points out correct therapeutical indications and measures. Inflammation, then, is not a monstrous or hideous entity within or fastened to the living body, to be shaken off or expelled as an unwelcome guest or viper. Regard it as a lowered life—an evidence of altered vital action tending to lower forms of organizations—and it will not, in all cases, be attacked in practice with the lancet, mercury and other depressing agents and measures. These may be, and often are used advantageously, but correct therapeutics involve energetic restorative measures corresponding with the extent to which depressants are made use of.

But let us analyze the phenomena of inflammation. They are morbid sensibility—that is, more sensitive than in a condition of health; pain more or less acute, accompanied with redness, increased temperature and swelling, with generally more or less febrile commotion of the whole system.

As to sensibility, if nutrition and oxidation were proceeding normally, there would be only natural or normal sensibility. To have increased sensibility we must have increased oxidation, or destructive metamorphosis, for we can perceive no form of force existing, only as it proceeds from some other force, and that other force in morbid sensibility, is increased oxidation.

Pain is, probably, in every case, due to the increased tension of the parts caused by the retarded circulation, demonstrated by innumerable observers in the past, and to the extravasation or effusion of the more fluid parts of the blood, serum, into the cellular tissue, and the products of the increased oxidation going on. The redness is due to the presence of the greater number of red discs, the carriers of oxygen, supplying the means for the destructive metamorphosis or oxidation. So of increased temperature—this is an incident, though an invariable accompaniment of the increased oxidation, for heat—free heat—or heat measurable by thermometers, is an invariable accompaniment of local or general per oxidation, or retrograde metamorphosis of organic tissues.

And the swelling, it, too, is an incident of the per oxidation due to the increased quantity of blood, the extravasations into

the cellular tissues of its more fluid constituents, and the products of retrograde metamorphosis or oxidation going on, and detained in the part which is the seat of the changes pointed out.

It did not escape the notice of observers in the past, that inflammation sometimes occurred in the serous membranes, as the peritoneum, which did not present any of the characteristic phenomena of increased sensibility, redness or pain—they do not say heat, for that could not be absent—and the use of the thermometer would reveal the fact that an excessive oxidation was in progress somewhere, and with that fact pointed out as a certainty, it would be less difficult to find out its most probable seat even in cases of masked peritonitis or pleuro-pneumonitis.

This is probably the correct philosophy of all inflammatory actions, whether common, rheumatic, erysipelatous, diphtheritic or specific; these different forms being due to the greater or less intensity of the local oxidation, or to the local and general per oxidations. Diphtheritic is, most probably, an example of an intense local and general per oxidation of a certain class of tissues. Erysipelatous an example of another class of tissues; while rheumatic is confessedly more difficult of satisfactory explanation, though not, probably, impossible, because this mode of explaining diseased action is of comparatively recent origin, and its details not fully understood as yet. This philosophy certainly explains the empirical therapeutics with which inflammations are more successfully managed. General blood letting diminishes the mass of the circulation, and the carriers of oxygen—the red discs—while at the same time it retards the transformation of albumen into fibrin, or fibrin into albumen, as the case may be; for these substances are isomeric, that is, similar in chemical elements and mutually convertible, the one into the other, and the conversion of albumen into fibrin is one of the changes effected too rapidly in inflammation; and as it is an abnormal action, is an evidence of lowered organic life. General venesection, then, brings the forces of the system back to their normal action, and so becomes an agent of great importance in bringing the system up to the standard of healthy action, while at the same time it diminishes the excessive per oxidation depressing it.

By depletion locally, by cups or leeches, the tension of the part is relaxed, the products of the per oxidation permitted to escape, the circulation re-established, and the per oxidation diminished.

So of other local applications, as lotions, poultices, etc. By evaporating lotions, ice, or cold applications, the temperature is lowered, and with diminished temperature the per oxidation is retarded. While with warm poultices or fomentations the tension is relaxed, the circulation re-established, carrying with it the results of the per oxidation, and bringing the part up to the normal standard.

The action of Veratrum Viride is, doubtless, by diminishing destructive metamorphosis in that portion of the nervous system, more immediately concerned in furnishing the dynamics of the circulation and digestion, as evidenced by the diminished volume and frequency of the hearts action, and nausea and vomiting; and as a secondary result, reducing the dynamic force upon which the local per oxidation depends. Opium, most likely, in the same way, by a primary diminution of destructive metamorphosis of another part of the nervous system, and as a secondary result limiting the local per oxidation.

Mercurials, salines and decreased food, act, doubtless, by re-establishing destructive metamorphosis at other points than the local per oxidation, which have been suspended, and the local per oxidation is, doubtless, the expression of the general constitutional condition.

These are the agents and means by which acute inflammations are more successfully managed by the physician, though, as has been seen, the philosophy of them differ very widely.

Their action is confessedly based on the idea that acute inflammation is a higher grade of organic life than the natural condition of the tissues in health. In sub-acute and chronic inflammations, as well as some peculiar forms of acute, as diphtheritic, erysipelatous, rheumatic and specific, these remedial measures are less successful, and in some of them, as diphtheritic, erysipelatous and mucous, are positively injurious; and if vigorously carried into effect, will pretty generally and speedily end in the demise of the patient. In these, *i. e.*, diphtheritic, erysipelatous, some forms of mucous, and some forms of specific, exactly the opposite measures and most successful, as bark, iron, better food, alcohol, and the avoidance of all depressing measures, or measures that hasten the disintegration of the tissues.

The seemingly contradictory mass of empirical facts can all be harmonized, and the therapeutics of the very opposite pathological conditions, regarded in the medical mind as inflammations,

may all be reduced to order and harmony, by regarding all forms as conditions of lowered organic life of a part, or the whole of the system. And herein is the whole philosophy of the pathological conditions and therapeutics—common inflammation is, most likely, strictly local; while diphtheritic, erysipelatous, rheumatic, mucous and specific, are but local manifestations of the constitutional conditions behind them.

Thus you will see that with correct philosophy to guide us, we apply each remedy understandingly, basing its appropriateness upon what is needful to accomplish in each individual case and not because any remedial agent or measure is reported as good for certain diseases by name.

It now only remains for me to bring to your notice some authorities besides my own brief statements for this mode of explaining diseased action and therapeutics. It is not altogether original with myself, nor on the other hand have I ever found in books or journals anything just like it. Chambers, in his clinical lectures, states that inflammation is to be regarded as a condition of lowered organic life of the tissues, but gives no philosophy. The philosophy is based on the persistence of force as it is presented in this paper. I do not know how better to state it than that it is the system of equivalences or causes and effects. If I find an acute inflammation with pain, increased heat, redness and swelling, I must regard them as the effects of some causes—forms of force, if you please—depending on some other forms of force. Now, in unravelling the often tangled web, I separate them into as few and simple elements as possible, and then seek to find out what modes of force it is that is giving rise to these new modes of force or effects. I may not always succeed, even to my own satisfaction, as well as I could wish, but generally far better than in any other mode of investigation, for this method of regarding physiological and pathological phenomena is yet in its infancy, and has no literature of any extent to which reference can be made in cases of doubt or perplexity. But it is growing, and the references to it in the journals increase.

In a review of the second volume of Flint's physiology in the *American Journal of Medical Science*, for January, 1868, by J. Aitken Meigs, the following remarks occur :

"Bichat in his well known treatise on *Life and Death*, declared that 'physics are not accessory, but foreign to the science of physiology.' Since the time of Bichat it has been a prevailing

doctrine among physiologists, that the phenomena of life are wholly distinct from those of inorganic matter. The extraordinary progress which has recently taken place, however, in different branches of physiological science, has conclusively shown that many of the so-called vital phenomena are, in reality, explicable upon physico-chemical principles alone. The conviction is yearly growing stronger and stronger in the minds of physiologists that the diversified and complicated processes which constitute the life of man, will sooner or later be brought within the domain of physical science. At a meeting of the British Association, held at Nottingham, in 1866, Prof. Huxley, the President of the Biological Section, in the course of his address did not hesitate to say that the science of physiology was nothing more than applied chemistry and physics. Such broad statements are undoubtedly premature, and not warranted by facts. They, nevertheless, are very significant of the present tendency of physiological science."

In the same number of the same journal, Prof. Jackson, of the University of Pennsylvania, has a paper on "Inflammation, its nature and purposes," whose general drift is in favor of regarding it as a lowered form of organic life. He says: "Hunlers' healthy" inflammation, the remedial agent of nature, consists in angmentation of the blood, with local *raptus*, (that is, partial death of the part,) congestion and effusion. Without increase of fibrin there is no inflammation: there may be perversion of the plastic nutritive process, or destructive action, as ulceration of an indolent character, stationary and passive to all treatment for months. The process of inflammation or augmentation of fibrin in arresting the first stage of morbid action, existing in a living structure, is the effusion of the liquor sanguinis saturated with fibrin, and filling up the entire seat of the disease, and even extending beyond it. Coagulation of its fibrin takes place, and the whole of the structure involved in the disease is at once *carried down to the lowest degree of vitality*, probably below that of bone or cartilage.

All organic action, morbid or natural, is suppressed when this process is perfect. The disease is at an end, as it were, stamped out. The surreptitious organization when large, for a time remains passive; its removal is affected in several modes, viz.: resolution, suppuration, moist gangrene. The process is most clearly demonstrative when it occurs in large organs, as the lungs

in pneumonia, in which the different stages advance in regular order, having well defined characters, easily recognized by auscultation and percussion." *Am. Jour. Med. Science*, January, 1868, page 107.

Again, "the production of fibrin in the specific inflammation, the subject of this memoir can effect its purposes in nature only when its constitution and its coagulating action are perfectly developed. This can not take place except the blood, and especially the albumen, from which the fibrin originates, is in a normal or healthy state. These conditions are variable, and then the fibrin is equally unstable in its character and rendered unfit for its allotted office in physiological therapeutics. The causes that derange the constitution of the blood and fibrin, destroying its natural and remedial powers, are too numerous to recall, they can only be slightly indicated. Such are habits of life, modes of living, quality and quantity of food and drink, the quality of air breathed, atmospheric contamination of various kinds, malaria and prevailing epidemics. The disturbing action of these are most strikingly displayed in pneumonia. When the constitution of the patient is good, little more is required than to watch the course of the disease, *the inflammation will take care of itself*. It is the patient himself who is to be carefully looked too; his forces which are to carry him through the conflict are to be judiciously sustained, and all disturbing causes, moral and physical, guarded against. In cases of pneumonia, and when the anti-phlogistic treatment had been fully carried out, the convalescence is difficult and protracted. I have known two deaths to occur evidently from exhaustion. A limited portion of a lung had been the seat of disease, and was nearly restored to its natural state; and yet death took place with the disease extinct. Prof. Wood states in his practice, Vol. II, page 30, there is reason to believe that in pneumonia patients have been starved."—*Loc. Cit*, p. 109.

Translations.

About the Treatment of Ovarian Cysts without an Operation, By Courtry.

(*Revue de Therap. 1867, No. 3, Page 61.*)

Translated from *Die Zeitschrift für Geburtshelfer und Wundärzte* for 1867, No. 3,
By M. HELLER, M. D., Cincinnati.

No one can be more convinced than myself of the obstinacy with which ovarian cysts usually resist all treatment, the disposition to become aggravated, the probable fatal result of the majority of cases, the uselessness and danger of puncturing, of injections and all palliative surgical treatment, from the practicability and necessity of such radical treatment as extirpation alone affords, and yet I have never undertaken ovariotomy, without having first subjected the patient to all rational remedies, which the case seems to indicate. I was so fortunate as to conquer the disease and to bring about resolution of the tumor, by the employment of these remedies in two characteristic and far advanced cases, in which I did not expect, while following a resolving treatment, that they were capable of exercising a powerful effect upon the disease itself. Yet in a large number of other cases these remedies (to be named directly,) did not produce any improvement, and although they did not prevent the fatal issue in certain patients, and, nevertheless, they were not sufficient to save others from the necessity of a dangerous operation; still I believe to be able to show here and describe, individually, two favorable results more minutely, as results like these are alike encouraging for the patient as well as the physician, and must not be forgotten.

The treatment, which in such cases I employ, embodies the following remedies:

1st. Preparations of gold, namely, oxy of gold in the dose of from two-fifths Milligramme in the beginning and gradually increased.

2d. Restoratives, tonics, reconstituentia, vichy water, iron, chichona, etc.

3d. Resolving embrocations, principally iod. of lead, iod. potass in the abdomen.

4th Diuretica, as embrocations, and internally administered, such as squilla, digitalis and nitrate of potash.

5th. Finally and mainly, methodical increasing pressure over the entire abdominal surface, by means of elastic bandage.

I will remark that in the two following observations, the cure was effected, in one since three, and in the other since two years.

First Observation.—Right, probably unilocular, very large and not punctured ovarian cyst, in a lady forty-three years of age.

Treatment.—Gold oxide, resolving embrocations, methodical compression with elastic bandage. Cure.

In September, 1863, I was consulted by a lady who suffered for the previous five years with an ovarian cyst, and which presented the following character: Ovarian cyst apparently unilocular, and, probably, with serous contents, and likely developed on the right side, which commenced about four and five years ago, and which produced considerable emaciation without, however, disturbing the continuance of the menses, though the patient was forty-three years of age. The uterus was slightly inclined to the left and seemed to be connected with the tumor only through a long pedicle, it is also probable that no adhesions existed between the cyst and the abdominal walls, or the viscera, and not between the tumor and the uterus.

Treatment.—1st. Internally each morning, to be taken, a pastille made on the following plan:

R.—Auri. Oxide, 0.05 Centigramm.

Chocolatæ. Med., q. s.

M.—Div in ten Pastilles.

When the ten pastilles are consumed, ten others are ordered, in which ten C. G. of gold oxyd are contained in ten pastilles, and at a third time, fifteen C. G. of gold oxyd for ten pastilles; and so on until the dose for ten pastilles contain 0.05 C. G. of gold oxyd; then a report of the condition of the patient is to be made to the physician in order to be able to follow up the treatment. At the same time a decoction of grass root with a small addition of milk and nitre is given. Milk, if it agrees, may make up a great deal of the diet, in order to get its diuretic, otherwise the diet must be generous.

2d. *Externally*, the abdomen, the inguinal regions, the inner surface of both thighs are rubbed morning and evening with the following:

R.—Axung. Porei, sixty gramm.

Plumbi. Iod., six gramm.

Potass. Iod., two gramm. M.

At a later period the parts are painted with diluted tincture of iodine; dry frictions are daily made over the entire rest of the body, if frictions, in the groin, on the inner surface of the thighs over the epigastrium and in the lumbar region are borne, a woolen cloth moistened with tincture of scilla or digitalis may be applied, in order to augment the secretion of urine. Finally the inward compression of the abdomen, day and night, by means of an elastic bandage, which may be lined with a piece of fine linen or oiled silk, in order to keep up the action of transpiration is of the highest importance.

This treatment was followed up for one month. Madame C. has taken ten pastilles containing 5 C. G. of gold oxyd, one-half C. G. to the pastille; she also took ten pastilles, ten C. G. of gold oxyd (i C. G.) the latter of which she divided so that she took only one-half C. G. per day. She applied the abdominal bandage, and rubbed with the ointment of iod. plumbi and iod. potass.; she also drank the decoction of grass root with nitre. Under the influence of this treatment secretion of the urine was materially augmented, the abdomen has decreased in size very rapidly, and no trace of the effusion remained. Madam C. only complained about a great deal of muscular debility, and yet the appetite was good, the expression lively, the mucous membrane of a natural red color, and no febrile condition present; the carefully examined abdomen in its entire dimensions did not elicit the presence of a tumor or a cyst, nor a swelling of any kind. The aorta abdominalis pulsated distinctly, and its dimensions appeared to us of an unusual development. Madame C. intended to give up the treatment, because her menses which showed itself a few days previous appeared immediately upon taking a few pastilles of the gold oxyd at i. C G. We advised her, however, to continue them, in order to secure a permanent cure without increasing the gold; since the treatment three years elapsed and the cure has sustained itself. There is no tumor in the abdominal cavity, all functions are normal, the emaciation has disappeared, strength has returned and the general health is flourishing.

Second Observation.—Right multilocular, voluminous and not punctured ovarian cyst in a child twelve years old. The same treatment and results as in previous observations. In the month of July, 1864, M. F. brought his twelve year old daughter who suffered with an ovarian cyst; the former condition of the patient,

my opinion, and the effects of treatment in the case, are so excellently presented in the following description of Dr. Anguier who took them down at my request, that I can not do any better than to rekapitulate here the work of my worthy colleague.

In October, 1864, a girl of from nine to ten years of age was brought to me who suffered with a tumor on the right and lower side of the abdomen, almost as large as a fully developed foetal head. This tumor was pyramidal in form, hard, round and perfectly painless, without a trace of fluctuation. The base less broad than the point, extended up to the navel, and reached down into the pelvis. It was easily circumscribed and separated from the viscera lying circumference. The child's health was good, digestion and defecation regular, and the urine in quantity as well as quality normal.

Six months ago the mother accidentally detected the presence of the tumor, which was then about the size of an orange, and as the family physician did not venture to pronounce the nature of it, nor directed any treatment, the child was taken to a neighboring city and given in the care of an excellent surgeon; the latter, however, did not say anything positive about it, but pronounced it an indolent and doubtful tumor, and without assigning proper reason for his treatment ordered depurantia and iod. of potass.; these very irregularly executed orders did not produce, however, any improvement, the abdomen still enlarging more—the child was brought to me.

After a protracted examination, and after long reflection, I supposed it to be an affection of the ovary, but on account of the hesitancy of the two respectable colleagues, one of which has my full confidence as to his scientific knowledge and experience, I restrained myself to some extent in not determining my diagnosis accurately; the more so as I believed to save the child from hydrops of this organ previous to puberty, I limited myself to the external application of iodine and laxatives of calomel, and nitrous decoction, yet I communicated to the mother my apprehension for the child's future, and requested her to bring the child to me again, from time to time; but two years elapsed since I examined her again, and during which time other physicians were consulted, and other remedies employed without any benefit to the young patient,

In the course of the month of June, 1864, the father came and requested me to call at his house to see his daughter, who, in

consequence of indigestion, is confined to her bed, a condition in which she is from time to time. While touching the abdomen, which was painful to the touch, I was astonished by its size; the tumor had become enormously enlarged since I saw the patient; it was not any more circumscribed on right or lower portion of the abdomen, than last year, but occupied nearly the entire abdominal cavity and presented a complete ascites; but with the difference that the sound on percussion was dull, and fluctuation indistinct. The child presented, at this moment, all the symptoms of a *gastro enteritis*. Pulse frequent; tongue red and dry; the abdomen, upon the least pressure, painful, and from time to time, vomiting of the medicine and some bilious matter; moreover the patient's expression predicted that the abdominal tumor exercised a troublesome impression upon the function of digestion, as the child since I had seen her had become considerably emaciated; proper rest in bed; emollient decoctions and a few leeches over the epigastrium improved this condition, and when I found her recovery sufficiently advanced to be able to travel, I advised her parents to accompany her to Prof. Courty, in Montpellier; it was about the middle of July, 1864.

After a careful examination, Prof. Courty was convinced that the tumor is really a cystic dropsy of the ovary, that it was a multilocular cyst, because it presented protuberances and roughness upon the surface and particularly fluctuation, although sensitive, was, nevertheless, indistinct, than is the case in a unilocular tumor. He was less surprised than I thought he would be to find such a tumor in a child of this age; but he had opportunity to observe other examples, among others is a young girl in Edinburg, in the practice of Dr. Simpson.

The father of the little patient who corroborates the statement of my excellent colleague. Dr. Anguier, informed me that the tumor commenced to develop itself about three years ago; in the beginning it was about the size of an egg, and then of an orange. At this time, July, 1864, it was larger than the head of a newborn child. The abdomen upon a level of the navel measured 0.67 centimeters. The young patient was in her twelfth year and menstruation had not appeared.

Although having little confidence in medicine, yet Courty ordered, not finding ovariotomy nor puncturing of eminent necessity, gold oxyd in the dose of one-tenth of a gram, and according to its effect to be increased; also nitrous tissue and several laxatives,

from time to time, in order to keep the bowels regulated, and principally the methodical compression by means of the elastic bandage. These remedies were employed since our return in London.

Not two weeks elapsed before we observed an improvement in the condition of the tumor; it appeared softer, less painful; the appetite improved and strength appeared increasing; vomiting did not return, and abundant diuresis set in to which we attributed the begining of the improvement. Encouraged by this result, upon which we dared not count, however, I increased the doses of gold and nitre, and in less than a month from the beginning of the treatment, a decided decrease of the abdomen was visible, after the bandage became loose, whether from the decreased condition of the abdomen, or from loss of its elasticity, it was made shorter for a few centimeters on each side; the relaxation of the tumor was much more visible and the general condition of this interesting patient, showed so well, as well as the local condition, the efficacy of the remedies applied, the treatment was continued for two months longer, with the same effect. In January, 1865, not a trace of the tumor remained, the abdomen became soft and insensible, the patient cheerful and satisfied, the functions of digestion were normal, and corpulence followed the condition of weakness and the six months ago marasmus; all this showed sufficiently that the cure was complete. Up to this day the cure sustained itself.

I must add that up to date, December 1, 1866, I had not observed new cases of cure, in course of medical treatment, the chlorate of potass recommended by Graig I have tried several times, but without any better result than the other remedies. I do not find that it is disuaded to make a new trial with it, yet I doubt if it can be considered more of a specific, in affections of the ovaries, than any other stimulating remedy.

Medical Societies.

Proceedings of Cincinnati Academy of Medicine.

JOHN DAVIS, PRESIDENT,

J. L. NEILSON, M. D., SECRETARY.

DISCUSSION ON DIPHTHERIA.

DR. CARROLL said the paper presented by Dr. Davis was merely the history of the views of one man as opposed to all the accumulated knowledge and experience of many brilliant and reliable authorities, both ancient and modern. Ignoring the motion pending before the Academy, he then proceeded to enumerate some of the positions taken by Bretonneau, characterizing them as absurd, particularly that he should have recommended any difference of treatment between ordinary laryngeal or tracheal inflammation, accompanied by deposits and the real zymotic throat affections, such as searlatina, because he himself held that whatever might be the disease present, with or without deposit, there nevertheless invariably existed such a marked degree of inflammation as to make blood-letting not only beneficial but absolutely necessary. Bretonneau, in his opinion, by making every throat disease diphtheritic, had driven out of practice that radical depletion, without which the treatment of inflammatory diseases of the throat was simply absurd. Had himself treated a number of cases of throat trouble by bleeding nearly to syncope, affording in every instance the most marked relief.

Dr. Bartholow thought it was of little value that such a paper had been presented; had the views it contained been new, novel or even those of the essayist, it would have been of some value, but it seemed to him that the gentleman had studiously endeavored to conceal his own views and instead, paraded before the Academy views, the very author of which had repudiated in every particular. It was in this way that erroneous views so often crept into notoriety; and in order to have reliable statistics, we must inquire, first, is the author credible, is he honest, and second, has he the ability to make correct observations. Now he was prepared to show by Rousseau, the favorite pupil of Bretonneau, whose home was with Bretonneau in Paris, that the opinions expressed by the gentleman were not those finally held by Bretonneau, and not the present opinions of France.

He then proceeded to quote from Troussseau's Clinical Medicine, Vol. III, Second Edition, 1865, in regard to errors in diagnosis, in confounding throat diseases accompanied by plastic exudation with diphtheritis. Page 314, Common Angina without exudation is described; page 318—19, Gangrenous Angina with exudation; page 329, Phlegmonous Angina, which so nearly simulates the grayish, ashy sloughs of diphtheria. In Lecture 19, we have the differential diagnosis given in full, wherein are mentioned two forms of Diphtheria: 1st. Diphtheritic Angina corresponding to our membranous croup; 2d. Malignant or true Diphtheria. The disease was, according to Troussseau, a contagious disease, *par excellence*, affecting in its local manifestations both the skin and mucous membranes; it attacked, as a rule, all denuded surfaces, having, however, a marked preference for the larynx and trachea. It, however, developed upon all mucous surfaces, and he enumerated the varieties, nasal, buccal, anal, vaginal, etc. Sometimes the exudations were exclusively developed in the pharynx. The speaker finished by stating two more points of distinction, viz: albumenurial and paralysis, saying that with these distinctive symptoms in one's mind, the anginos affections could not be confounded with the Diphtheritic.

Dr. John Davis was prepared to show that the elaborate manner in which Dr. Bartholow had produced, before the Academy, the opinions of Troussseau, and the late ones of Bretonneau, was entirely unnecessary; that in no respect did the opinions expressed in his manuscript conflict with those presented by the gentleman. He had presented, in detail, the views of Bretonneau, merely to show their fallacy, and after quoting author after author, including the very authority presented by the gentleman, he wondered that he should have so mistaken him. The speaker then quoted from page eight of his manuscript, as evidence that the views expressed by himself and Troussseau did not conflict. He then went on to say that Diphtheria was a new name for a disease, and that all anginoses diseases were Diphtheritic if contagious and epidemic. The gentleman had misstated his position, had endeavored to place him in a false light; had mysteriously hinted at want of credibility and honesty of observations, he knew not for what purpose or with what application, but he would say that the gentleman had not only been unkind and ungenerous, but also incorrect.

Dr. Carroll objected to this new classification of throat diseases,

this establishment of a new ideal which was not generally comprehended by ordinary practitioners. It led to erroneous diagnosis and imperfect treatment. It was sufficient for all practical purposes that we all know the classical appearance of throat affections as laid down by the great fathers of medicine. In these degenerate modern days, practitioners had got into the habit of confounding cases of throat disease and typhoid fever as Diphtheria.

Dr. McIlvaine decidedly objected to the irrelevant, useless and disconnected discussion carried on between the venerable gentlemen on his right and the more youthful and enthusiastic brother on his left. The one did not seem to know what the other meant, and the other had not a clear conception of the former's position. But he could see that they both stood upon the outskirts of the profession; they represented the extremes of the profession. The one did not want any better authority than the men that had lived before him, and so fell back confidently upon the authority of Cullen and others of a hundred years antiquity*. There was another member who had discussed, in a manuscript, the views of fifty years ago. The discussion seemed to be conducted in much the same manner as the celebrated controversy as to who was the "father of American surgery." Wherein it having been declared by Dr. Parvin, that Dr. Blackman was the "father" in question, it became incumbent upon Dr. Mendenhall for the honor of his school, to prove that Dr. Mussey was the individual who fitted that niche in the temple of fame.

The authority presented by the gentleman on his left, as the representative of France, did not occupy that position; he was a great romancer, if he was a great scholar. The gentleman was himself a kind of St. John the Baptist in the medical profession, always running on with great eclat, to announce the latest and most astounding arrival in the medical world. He sometimes quoted poetry himself, but never indorsed it, "medical facts;" and while he was decidedly opposed to rushing new ideas in there by "hurrah," at the same time he deprecated the discussion of obsolete views.

Dr. Graham thought the subject under discussion was provocative, neither of laughter or merriment. Its gravity was such as to demand of the medical fraternity the most careful and earnest investigation, rather than the offerings of literature or the effusions of poetry, an opinion which he thought would be sustained

by all the gentlemen present, who, like himself, had had the painful privilege of waiting upon patients, who, as though with a cord about their necks, were being choked, hour after hour, in the relentless grasp of this frightful disease. In view of the responsibilities attached to the treatment, he thought the discussion should not turn upon the paper in question, and that all wordy combats as to the respective merits of this old author, or that new one were objectionable. What was asked for by the profession, was individual practical knowledge, and he was surprised that in a large city like this there should be a dearth of reliable and valuable personal experience. They had to consider two propositions: 1st. Not what are the ordinary phenomena of Diphtheria, (for had twenty gentlemen in our midst as many cases with their throats all plastered up with this exudation, there could be but one opinion,) but we needed to know of obscure cases where the disease not having been recognized in the beginning from the non-appearance of many of the most prominent symptoms, there shall have appeared, after a few days, something, such as a exudation on denuded surfaces, paralysis, albumenuria, etc., which have made the practitioner say, "this is a case of Diphtheria;" records of such cases would be of infinite value.

Second Proposition.—Treatment.—We are told that this authority and that one are entitled to great respect, but he considered the long list of vaunted drugs of questionable value. Could himself recommend no special treatment, except a constitutional and supporting one. Had made use of nearly all the local applications, but would particularize in favor of no one, thinking, however, that the nitrate of silver was the most objectionable. In speaking of obscure cases, mentioned in his own practice, a patient in whose ease the diagnosis being obscure, Diphtheritis was undeniably developed, for upon applying caustic to the fauces, exudation appeared upon the abraded surface, paralysis supervening in a few days. He asked, in conclusion, the honest, home observations of such cases as these by well known men in our midst; to merely historically state the views of others, views which are well-known to every moderately well read medical man was useless.

Dr. E. H. Johnson thought the discussion was becoming too general, and that the gentlemen were wandering from the point, asked the Chair to state the point, and in order to embellish and emphasize his remark, told a little story.

Dr. Murphy had not heard the paper in question read, but he thought as all our efforts should tend to but one object, viz: the acquirement of reliable and practical knowledge, the observations of the disease should be localized. He agreed in every respect with Rousseau, but it was well known that the same disease varied in different situations, seasons and individuals. It was not necessary to know the intangible principle which caused the disease; that it was a contagious and infectious blood poison, had been so well established by facts that it required no other demonstration, instancing the fact that no less than five prominent French surgeons had fallen victims to the disease by sucking the opening in the throat of patients, upon whom the operation of laryngotomy had been performed, for the relief of the disease. Physicians, who had practiced in our midst for years, must have observed the following varieties of throat disease. 1st. Croup, which affects the trachea and bronchial bifurcations. 2d. The disease accompanied by deposits upon the fauces, larynx, tonsils, etc., which he called Diphtheria from that displaying the smallest deposit up to the most wholesale and complete exudation. 3d. Pharyngitis, with which all tobacco chewers, particularly in Winter, were affected. 4th. Catarrh beginning in the frontal sinuses, running down upon the velum and epiglottis, causing ulcerated throat. In depraved strumous or serofulous patients, we had chronic Tonsillitis with enlargement of the mucous follicles of fauces, resembling bird seed, called Follicular Tonsillitis. Beyond this we had only syphilitic modifications of the same diseases. These were all the anginous diseases common to this latitude. He believed that many honest but inexact men were in the habit of confounding this disease called Follicular Tonsillitis with Diphtheria; when gentlemen from the country enumerated batches of cases, fifty at a time, as all cured by this agent or that drug, they were contrary to all the statistics given us by those whose views were of any value, and, therefore, totally unreliable and without value. Diphtheria, to his mind, consisted, essentially, of a pellicle, it being the chief diagnostic sign varying in size from one-eighth to one-quarter of an inch. This membrane appeared on various points of the mucous membrane of the throat and fauces, and there had never come under his observation a well marked case of Diphtheria, without this exudation. It might be on the velum, the tonsil, the epiglottis, folds of the fauces or so far down the larynx

as to be out of sight. The gentlemen, who were discussing the subject, would tell him on the one hand that this exudation, if not present to the eye before death, could be invariably developed by the post-mortem scalpel; while others would say, very many cases occur absolutely without exudation. He could himself readily believe the latter proposition, that there would be such a crisis, such a calamitous, overwhelming of the system by the poison of the disease as to prevent exudation; exemplified in other fatal diseases, as in typhoid fever, deaths occur without the peculiar eruption having made its appearance; and in cholera, where we have deaths without cramp or vomit. But his individual observations were that the disease commenced with pellicular effusion, and if it was not developed so high in the air passages as to be visible, it was invariably found in the vomited fluids or picked out of the larynx after the operation for the relief of the disease. Mentioned case in point, where there was every evidence of the disease without exudation, and upon the operation of laryngotomy being performed, the pellicle was immediately extruded through the wound. Some persons might say this was a case of membranous croup, but there was no symptoms of active inflammation, no croupish cough, no high temperature of body, no extreme rapidity of pulse; besides the extruded membrane was of the true gray or ash color. Believed the disease would supervene on Rubeola, and mentioned such a case in his personal observations where there was the most extensive exudation covering tonsils and fauces, extending down into the larynx and where, just before death, a perfect membranous cylinder was coughed up. Had known it come on immediately after scarlatina, but did not believe the two diseases could exist together; they could not, however, be mistaken, the one for the other, the eruptions being so different; bright scarlet, punctated and uniformly distributed in scarlatina; patchy, dark-colored and ununiformly developed in Diphtheria. Quoted Bouchut in regard to the presence of albumen in the urine and the complication of paralysis. In his own experience, the urine of persons affected with the disease being subjected to heat, the salts were first deposited, then dissipated and albumen developed by the further addition of heat. The paralysis began in the velum.

The disease was both contagious and infectious, infallibly propagated by the transfer of the pellicle as shown before in the death of surgeons. It was infectious, where the poor, wretched and

squalid, were crowded together in tenements and in families where one member after another would be taken down. That it was a constitutional disease could be proven by two facts. 1st. That from the severest to the mildest cases, the diseases always present the same well-marked characteristics only varying in intensity. 2d. A constitutional treatment had been the only one at all successful.

He had treated it by local applications but without effect, and now whenever he was brought to a case characterized by the membranous exudation, or presenting the intense toxic effects, he at once gave remedies which would liberate quantities of oxygen in the system, such as chloride of potassa, tincture of chloride of iron, etc., and afterward quinine, stimulants and food. Local remedies were of no value, except for their soothing effects, but to attempt any specific treatment locally, was trifling with the disease. In epidemics it was especially fatal, being early characterized by extreme exhaustion of the vital powers, as evidenced by the leaden countenance, sunken eyes, quick feeble pulse, cold extremities and large exultation. Death was occasioned in two ways, either from the extreme toxic effect or from laryngeal croup. Said that he had in the same family two cases illustrating these forms of demise. The severity of the disease depended upon the amount of poison introduced into the system, and if that amount was small, the case would be proportionately mild. This much should never be lost sight of in the diagnosis, that all zymotic diseases vary with the country, the circumscribed localities, in the successive epidemics and in the very individuals of the same family. In conclusion would say that he had not quoted authorities, because he thought the academy needed nothing more than his personal experience. In answer to Dr. Ludlow, who wished to know what stage of the disease he recommended laryngotomy, said, it should be performed early, when it was certain from the intensity of the symptoms, there would be no other resource or hope.

Dr. Carroll wanted to know what written authority made a difference between Diphtheria and Scarlatina was referred to Barthes and West. Dr. Carroll did not believe that either West or Watson made any distinction between the diseases, and no other authority except Dr. Wood, who said the disease often appeared without exudation, but even he was a man who wrote a great deal but did not think profoundly. Dr. Wood, among other distinctions,

said that scarlatina did not make its appearance in the throat but seldom, and whenever the disease so manifested itself it was diphtheritic in character, but he could, from his own observations, demonstrate the folly of such conclusions, for time and again, in cases of unequivocal scarlatina, there would be produced upon blistered surfaces this very membrane in question, whose presence in the throat was said to be diagnostic of this new disease. Said that all zymotic anginous diseases in modern times, were only varieties of scarlatina.

In 1791, the putrid sore throat which raged as an epidemic in Kentucky was of this character, where the full force of the poison was wreaked upon the throat, and was unaccompanied by eruption upon the body. In 1793 and 1808, we had successive visitations of the same disease, still unaccompanied by eruption, except a small amount about the jaws. It was not until 1825 that scarlet fever manifested itself over the entire West fully developed and characterized, both by eruption on the body and deposit or exudation in the throat. In this opinion he was upheld by Dr. Drake, who believed that the poison in all these epidemics did not differ. Dr. Hildreth had told him thirty years ago that the only treatment that succeeded in these different manifestations of the same disease, was uniformly active depletion, calomel and purging, and Dr. Fothergill held the same opinion.

The fact that the two diseases appeared side and side in the same family were apparently convertible, in fact only varieties of the same disease, should be sufficient to convince any close observer of the exact identity of all anginous diseases. The gentlemen wanted to make a disease that had no invariable characteristic. Very many varieties of throat disease might be manufactured to suit the convenience of certain persons, but they could have no determining symptoms. Indeed the disease did not exist, and in saying that it did, they only confused and invalidated treatment.

As had been shown there was nothing differing from scarlatina, either in pulse, tongue, exudation, etc., and how could we say "we have here a new disease." After all there could be no dispute, but that the divisions of the subject laid down by Watson, viz: Simplex, Angina and Maligna, are the only reliable data from which practitioners can act. Rayer held that these same divisions were alone reliable. He believed (Dr. Carroll.) that all the varieties of throat diseases, zymotic in character, were

caused by the same blood-poison that when mild they will run a fixed course, endure a certain time whatever might be the treatment; that we should not deplete unless there is exudation, but upon its appearance we should bleed, leech, vomit, purge, and apply cold externally. They should not attempt to treat a disease they could not diagnose. Whenever it should be proved to him that there were any points constant in this disease, and not found in scarlatina, he would be willing to accept gentlemen's theories. It was a serious thing to start a new disease which no one could certainly recognize, and for which, of course, there could be no reliable treatment.

He furthermore believed that the disease called Black Tongue was a variety of scarlatina. The disease had occurred in the same family, the children having scarlatina, and the poison in the older members only developing upon the scalp and mucous membrane of the mouth, probably because their skins were too thick to allow of the eruption showing itself. When a pregnant woman took scarlatina she died, but the eruption never broke out, and in the same manner when a pregnant women took erysipelas, both mother and foetus perished. In conclusion, he again impressed upon the members the great danger under the new classification of not acting vigorously enough in the treatment.

Dr. Richardson said that it had been asked by the gentleman, who had just taken his seat, "who among the well-known authorities had made out the differential diagnosis between scarlatina and Diphtheria." He would answer that Drs. Melgs, West, Condie, Flint, in fact all authorities agreed as to the difference, and he would say from his own experience that it was not at all a difficult matter to establish the most marked dissimilarity. In regard to scarlatina, the onset of the disease was most abrupt the child may have been running around in apparently the most perfect health, when suddenly it is seized by chill and vomiting, followed by the most violent reaction, pulse running up among the hundreds, great heat of surface and other intense febrile symptoms. Then we have the appearance of the efflorescence, which has a tolerably regular form of appearance from above downward. The febrile symptoms continue with great regularity until the end of the fifth, sixth or seventh day, when a marked desquamation succeeded by dessication takes place. It is after the declension that the albumen makes its appearance in the

urine, and if there is anything of importance in the differential diagnosis, consecutive to the appearance of the albumen, it is paralysis which comes on in eight or ten days, and in very young children is invariably accompanied by rapidity of pulse and febrile symptoms. Then there is the negative symptom of non-invasion of the larynx, the existence of deposit in the larynx being the rarest exception in scarlatina. He then contrasted with these symptoms the evidences of pure, primary Diphtheria, not that alleged to follow scarlatina, nor that form of exudation in the throat of children, broken down by some constitutional taint, but the true uncomplicated form.

Diphtheria is insidious in its approach and hence its fatality; for in this very stage the disease can be readily controlled, but the symptoms seem so trifling to ordinary observers, as not to excite alarm. There is a gradual undermining of the system; the patient becomes languid and pale, coldness of surface generally comes on, but even at this stage no exudation has appeared and there is no acceleration of the pulse, although it loses its force and firmness and becomes gaseous. Our fears are here confirmed by the occurrence of paralysis, which differs from all other paralysis, in that it is not confined to particular points but occurs irregularly. In the continuance of the disease we have next tumefaction at the angle of the jaw, confined to one side, the integuments being tense, pale and glossy, similar to incipient gangrene of the cheek; sometimes both angles are involved, but rarely. If at this time we look into the throat, we will see upon the opposite surfaces of the tonsils, a small mosaic, as it were, of membrane, pale gray, set in the tonsil and dipping apparently under the red border of healthy mucous membrane. There is faucial engorgement, but respiration even at this time is unaffected. There is a very trifling cough from the beginning, but until the engorgement of the glottis occurs, there is no acceleration of the pulse; but when this takes place there is rapidity of pulse, troublesome hacking cough and some physical inability to swallow; but this failure in deglutition is not due to presence of pain, for the patient does not complain.

(*To be continued.*)

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

Stellwag on the Eye.

Translated by Roosa and Hackley.

IN a recent issue, I gave a specimen selection from this work, with the promise of an early review. A personal acquaintance with the author, formed in 1854, in Vienna, and a familiarity with the German edition of this valuable treatise, gave me a special interest in seeing it translated. This has, at length, been faithfully done, and the profession in America owes a debt of gratitude to the translators for having supplied them with a systematic and complete book on ophthalmology. For several years past students have continued to inquire after a good text-book on the eye, and I have been obliged to refer them to Mackenzie, which is fifteen prolific years behind the present state of ophthalmic science; and to a few monographs and hand-books of very inferior merit, as being all that could be suggested in the English language. In French and German there has been no lack of valuable and thorough treatises on this subject, but to most students and practitioners in this country, they are, unfortunately, sealed. We now have an English edition of one of the most reliable of the many excellent German works that modern advances and discoveries in ophthalmic science have produced.

A great reviewer once said, he seldom *read* the books he reviewed for fear of taking a *prejudice* against them. The one now under notice is certainly not open to that risk. It will bear the most critical examination on any of the topics of which it treats. While in some of the chapters it is not exhaustive enough, and while I can not indorse all his theoretical notions, it is a safe guide and one of great practical utility.

Our space will not admit of a thorough analysis of the contents of the book, nor a reference to all that I find in it to commend. I shall, therefore, only allude to some of the objectionable features, leaving the reader to study the work itself for its stores of accurate and useful knowledge. In speaking of the effect of local blood-letting, the author says: "On the whole, the therapeutic results of the application of natural leeches are of import-

ance only in the external ophthalmia, that is in inflammation of the lids of and the conjunctiva." My own experience is just the reverse. I seldom find leeches, natural or artificial, of any great use in the diseases of the lids and conjunctiva, but in acute iritis and other internal inflammations, they have a decided and often very prompt effect. I have too often seen the great relief afforded by a few leeches to the side of the nose, in the severe circum-orbital pains, and unyielding pupil of acute iritis, to accept a statement of that kind.

Again, he says of atropine that it is not advisable to give it into the hands of the patient to be used, on account of the "extremely bad effects of even the smallest quantity when it enters the mouth or stomach." He advises the practitioner to apply it himself, and if he can not avoid in trusting it to others, it should not be given stronger than one gr. to the ounce of water. In most cases where it is indicated, it ought to be applied a number of times in the twenty-four hours, and, of course, it must be given over to the patient. To infants a few days or weeks old, I give it in a strength of one-half grain to the ounce, to be dropped into the eye two or three times a day. To children from two to ten years of age, I prescribe it daily in a solution of one to two grains to the ounce, used with the same frequency. In cases of adults with acute iritis, keratitis, etc., I give a collyrium of four grains to the ounce, to be used five or six times in the twenty-four hours.

In very acute and painful cases, I sometimes prescribe it much stronger and oftener, without any bad effect. The only precaution necessary is to avoid its running down the cheek into the mouth; and in cases where troublesome dryness of the throat is complained of, the lower lid should be drawn down for a few seconds after each application, and the head held forward to avoid its passing along the tear ducts to the throat.

In his chapter on *detachment of the retina*, the author remarks as follows: "The ascription of the exudative process to *choroiditis*, as were formerly done, is supported by no facts." Here again I think Stellwag is mistaken. While anatomists generally describe the retina and choroid as two distinct coats, yet *physiologically* the retina, the choroidal epithelium and the choriocapillaris are inseparable. This is especially true of the percipient layer of that membrane. The microscopical anatomy of the retina shows that the layer of rods and bulbs, and the external granu-

lar layer are entirely without blood-vessels. The *internal layers* are no doubt nourished by the central artery of the retina; while the real organ of vision, the *membrana jacobi*, receives its nutrient materials from the *capillaries of the choroid* through the medium of the layer of pigment cells which we call the chorooidal epithelium. This is confirmed by comparative anatomy, embryology, experimental physiology, pathological anatomy and clinical observations. For authority in this view of the case I need only refer to the investigations of H. Muller, Iwanhoff, Rosow, Steflan, and indeed many others. Assuming this then as proven, detachment of the retina, retinitis pigmentosa and other diseases affecting the two most external layers of that membrane are the result of disease in the chorio-capillaris from which they receive their alimentation.

The author, in treating of sympathetic irido-choroiditis, follows most foreign authorities in advising *enucleation* of the offending organ. For myself I usually practice ablation, including cornea, iris and a narrow zone of sclerotia, and find that it answers the same purpose as enucleation, and leaves a stump much better suited to receive an artificial eye. Whether there is a foreign body in the painful eye or not, abscission in my experience, as certainly relieves pain and sympathetic irritation, as removal of the whole eye. The iris and ciliary body are abundantly supplied with nerves and muscular fibres, while the choroid from the ora-serrata backwards is more vascular, but only very scantily supplied with nerves. Sympathetic inflammation of the eye is essentially an irido-cyclitis, and it is traumatic or idiopathic irido-cyclitis in one eye that so often excites sympathetic disease of the other.

If now these most sensitive and painful parts are removed in the operation, the strong sympathetic reaction in the other eye soon ceases. I do not wait either, as recently recommended by some writers, for a marked remission of the inflammation, but operate at once as soon as serious sympathetic trouble is apprehended.

The chapter on *Blennorrhœa*, among much that is highly practical, contains also some doctrines to which I must take exceptions. In the treatment after hesitating between nitrate of silver in weak solution as a collyrium, and the pencilings with strong solutions, he at last inclines to the former. In my own experience weak astringent collyrian of all kinds are rather injurious than beneficial. They increase the irritation, without checking the morbid process, and thus intensify the danger to the cornea.

With the exception of genuine diphtheritic conjunctivitis, it is seldom that judicious touchings with the *mitigated* stick, or pencilings with a solution of from twenty to forty grains to the ounce, once a day, does not act promptly in checking the proliferating process, reducing the swelling and thus acting as an antiphlogistic. It does not at all, as the author argues, interfere with the successful application of the genuine antiphlogistic treatment, but promotes its efficiency. It is not easy for me to conceive that "what is indicated in the morning may be contra-indicated at noon, and be urgently required again in the evening." A good brushing and washing off of the everted lids in the morning followed by cold compresses, frequent instillations of a strong solution of atropine, anodynes internally to allay pain, are the remedies that will most frequently check the violence of the disease and save the eye. Free division of the external commissure, paracentesis cornea, or iridectomy, are the only additional treatment when ulceration of the cornea is threatened or actually exists.

Further on, this same prejudice against the nitrate of silver crops out in the assertion that its immoderate use in *ophthalmia neonatorum* was one of the *main causes* of the epidemic *diphtheritic conjunctivitis* that recently prevailed in Germany. Again, in summing up the treatment of that disease, he says: "But the *abortive* method, which has very recently been adopted, involves the *most danger*." This abortive treatment is the pencilings with strong solutions of nitrate of silver already mentioned. I am greatly surprised to hear this remark from a man of the author's experience, and can not believe that he has ever fairly tried this method. For ten or twelve years I have treated all cases of purulent conjunctivitis in infants by the abortive plan, and I have never lost an eye where the treatment was commenced before ulceration had set in. The certainty with which the violent symptoms yield to it, and the rapidity of the recoveries has been a matter of astonishment. One single thorough brushing with a twenty grain solution of nitrate of silver, often reduces the swelling and profuse suppuration one-half in twenty-four hours. Infants, strange to say, bear it and yield to it much better than adults.

The chapter on the treatment of *blennorrhœa of the lachrymal sac*, is good as far as it goes, but he says nothing of wearing the stiles through the slit-up upper canaliculus, combined with systematic

injections. This abridges the treatment very much, causes much less pain and loss of time, and makes the result more certain and permanent. It is a modification of Bowman's method that I adopted many years ago, and have been well pleased with. But as I have already published my observations on this subject, I will not dwell on it here.

Finally, his exposition of Graefe's *modified linear extraction* of cataract, is very brief and unfaithful. He omits the wire speculum and uses the fingers for holding the lids open till the incision is completed. Then I infer, he puts in the speculum for the easier excision of the iris, but advises its withdrawal immediately after the iridectomy, the other steps being completed without it. This, it seems to me, increases the danger of escape of vitreus. I greatly prefer Graefe's plan of putting in the speculum at the start and not removing it till after the exit of the lens. The last modification by which the operation is reduced to its greatest simplicity, and its success still further enhanced, is, of course, not mentioned, as it has but lately been published. All pressure at the seat of the incision, and all traction instruments are abandoned. The cataract is made to escape by simple pressure with a flexible hard rubber scoop, from below upwards. By seizing the conjunctiva with the fixation forceps almost directly inwards, instead of below, as formerly recommended, and, as indicated in the cut, the puncture and counter-puncture are much facilitated and the forceps are not in the way of the scoop in the last step of the operation. In all my recent operations for cataract, I have adopted this procedure, and it has succeeded admirably. The wood-cut, on page 562, gives a capital idea of the knife and the incision. It seems to me that this ingenious operation thus simplified, is destined to hold its place and its professional popularity in spite of the objections of Von Hasner, Steffan and others who are still trying to invent something better in retaining the flap section.

The last part of the book, which treats of the anomalies of refraction, and accommodation and the great variety of functional disturbances to which they give rise, as well as of the affections of the ocular muscles, I have not now time or space to review. It is impossible to give an adequate idea of the many topics so elaborately and admirably treated of in this book of seven hundred and thirty-seven pages, without transcending the narrow limits of the "*Ophthalmological Department.*" I have only briefly re-

ferred to a few of the errors and prejudices of the author, instead of spending all my ink and energies in eulogies upon its great merits. No practitioner in this country who pretends to treat eye diseases, and certainly no students, should be without the excellent treatise.

E. W.

Tympanic Otorrhœa.

BY A. D. WILLIAMS, M. D., Cincinnati.

OTORRHŒA is divided into two heads, *Simple* and *Tympanic*. The former has been given in detail heretofore, the latter is the subject of the present writing. As its name implies, it is an otorrhœa that comes from the cavity of the tympanum. It simply means a discharge from the ear. This discharge may come from the external meatus or from the tympanum; hence the propriety of distinguishing the two according to the source of the discharge.

The most frequent cause of the discharge from the tympanum is acute aural catarrh (only the tympanum is affected by catarrhs.) which causes a copious secretion of slime and pus into the cavitas tympani. This soon fills up the small cavity of the drum, and consequently presses upon the membrana tympani outwards, until it either ruptures it or causes the membrane to ulcerate through, and thus gives vent to the accumulation within the drum. This discharge relieves at once the *acute* symptoms of the catarrh, which now subsides into the *chronic* form, and keeps up the tympanic otorrhœa for an indefinite time.

It is to be understood in this connection, that the eustachian tube is closed in these acute catarrhs by swelling of the mucous membrane, and hence the tympanic secretion has to break through externally. There is no other escape for it. This then is the *chief* cause of this variety of otorrhœa. The bony walls of the tympanum may be primarily diseased and ultimately cause a discharge externally. Polypi in the *cavity* of the drum always gives rise to tympanic otorrhœa.

The *diagnosis* is easy. First syringe the ear perfectly clean and then inspect the membrana tympani. If a perforation is visible and particularly if a drop of mucous or pus lies in the open-

ing, and pulsates regularly with the heart, which is pretty certain proof that the cavity is completely full of the secretion, then tympanic otorrhœa may be safely diagnosed. These pulsations are explained in this way. Every time the heart beats, the blood-vessels of the tympanum are filled up, and consequently press the secretion out through the perforation. This is repeated every time the heart contracts. Thence we can see the pulsations in this little globule of mucous. If no perforation can be found with the eye, try the Valsalvian experiment, which is to hold the nose and mouth and blow hard, so as to drive, if possible, the wind through the drum into the external meatus, and thus prove that that there is a hole in the membrane. Or better, perhaps, try this experiment. Fill the external meatus up with warm water and then press the tragus gently down upon it with the finger. If there is an opening in the membrane, the patient will feel or taste the water in his throat and mouth. This is certainly a more certain test for perforation than the Valsalvian experiment; but must never be made with violence.

In this way the diagnosis is to be made out, and can generally be done without difficulty. *Prognosis* is favorable so far as the discharge is concerned. Where there is a large or even small perforation of the membrane, and consequently a constant exposure of the mucous membrane of the drum to the influences and frequent changes of the atmosphere, that membrane will be more or less subject to repeated attacks of inflammation. These, of course, will bring with them repeated discharges from the ear. In this respect the prognosis is, to some extent, unfavorable.

The *dangers* of tympanic otorrhœa are not so trifling as practitioners usually think. Patients not unfrequently die of brain symptoms following upon a long standing discharge from the middle ear. This is not to be wondered at. Indeed the wonder is that such complications do not oftener occur. Anatomy teaches us that the mucous membrane of the tympanum can not be separated from the periosteum of that bony cavity. Hence this membrane must functionate in two ways, as mucous membrane and as periosteum. Consequently every acute or chronic inflammation of the mucous membrane of the drum is at the same time an acute or chronic periostitis of the tympanic cavity. We all know how easy it is for periostitis to involve sooner or later the bony tissue beneath it. When once established this can easily

extend to the meninges of the brain and even to the brain itself. This is certain to carry the patient off.

Some months since a patient of ours died with symptoms of acute meningitis, following upon long continued and frequent repeated attacks of tympanic otorrhœa. The request for a post-mortem examination was granted. The diagnosis, therefore, must remain somewhat in doubt. Dr. Conner, of this city, was kind enough to tell me of a patient of his, a child, that died with brain symptoms supervening upon the tympanic otorrhœa. Dr. Bramble, also of this city, was good enough to tell me of a patient of his, an Irish woman, that died of brain disease following an attack of tympanic otorrhœa. I refer to these cases here simply to show that a discharge from the cavity of the tympanum is not attended with perfect safety to life.

The treatment does not differ much from that advised in simple otorrhœa. The first indication is to keep the ears clean by syringing them with warm water about twice a day. Then drop, always after the syringing, medicated solutions into them. The very best solution is twenty to forty grains of compound nitrate of silver to the ounce of water. This should be used twice a day. If it runs through into the throat, it will do no harm. Before syringing it is well to have the patient blow through his ear, and thus force all the secretions from the drum into external meatus so that it can be washed away. If the patient is not able to do this, then warm water may be pressed through the drum into the throat, as above described, and thus cleanse them of all their contents. The great desideratum is to cleanse the ears as perfectly as possible, so that the medicine will come directly in contact with the diseased surface, and thus make a more decided impression.

Instead of the silver solution, any of the astringents, in moderate strength may be used always after syringing. Especially the cupr. sulph. in from five to twenty grains solution sometimes acts like a charm after the silver solution has failed. Acetate of lead should not be used very long, for fear of a lead deposit in the cavity of the tympanum. If it is thought that the solutions do not enter the cavity of the drums, it is well to press them through so as to medicate directly the mucous membranes within the cavities. These membranes should not, however, be cauterized very often for fear of making them atrophy and become dry. In this way the treatment is to be kept up till the discharge,

sooner or later, ceases. Sometimes it is very tedious, and other times it ceases very readily. The internal treatment is to be regulated according to special indications. Depletion or tonics according to the general condition of the patient. Depletion will rarely ever be necessary, but tonics very frequently, especially with unhealthy children, where tympanic otorrhœa is quite common. If there is any specific taint, of course that must be treated specifically.

Polypi of the Ear.—Polypous growths are met with quite frequently. They may fill up the external meatus entirely or partially. Sometimes project even at the external orifice. Their diagnosis is very easy, as every one will readily recognize the polypous tumor as soon as he sees it. They keep up a constant muco-purulent discharge from the ear, which is usually quite fetid. Their pathology is hypertrophy of mucous membrane. They are developed, therefore, only from mucous membranes. Consequently they can never grow from the walls of the external meatus, as they are covered with ordinary skin. These aural polypi must, therefore, all originate in the cavity of the tympanum. They first fill up this cavity and then force their way through the membrane into the meatus, and thus make their appearance externally. I am well aware that there is an idea in the profession that polypi *may*, and often *do* grow from the walls of the meatus. According to my experience they *always* spring from the tympanic cavity, and hence I refer to them under the head of tympanic diseases. I have removed some twelve or fifteen of them, and so far have seen none that came from the walls of meatus or outer surface of membrana tympani. Pathologically speaking they can originate only from mucous membranes.

Treatment.—They must always be removed either by medicines or by instruments. Removal by the latter is always to be preferred when practicable. This can best be done by means of what is known as Wilde's Polypus Snare. It consists simply in a fine wire noose, which is passed down over the polypus by means of a bent forceps. The wire is now tightened around the polypus and its body drawn out, after having been cut off by the wire as deep down as it can be passed. The stump will now bleed considerably, and the ear will have to be washed out so as to see what remains, if any.

If the noose or snare can not be used, as in cases of very small polypi, broad toothed forceps may be used to tear it away by pieces. Graefe's forceps for fixing the eye answer the purpose

very well. In pulling the polypus away with the forceps, it is necessary to be extremely careful not to get hold of the skin of the meatus. After the bodies have been removed as perfectly as possible and only the pedicles remain, they are to be cauterized with nitrate of silver or chloride of zinc. This is best done by getting a little medicine to stick to the end of a probe, and then pass it down the meatus, always looking with the mirror where it is going to, till it comes upon the pedicle. This is to be repeated once a day till the pedicle is destroyed. In the meantime some astringent solution may be dropped into the ear a couple of times a day after syringing it. A five to ten grain solution of nitrate of silver may be used. A few applications of the caustic will usually be sufficient. By the time the pedicle is destroyed the discharge will have ceased and the ear will be well. It is better, however, to continue the astringent solution for some days, and thus prevent the possibility of a re-growth of the polypus. Of course the perforation of membrana tympani, and, perhaps, other injuries will remain even after the polypus is gone. Of perforations of the membrana tympani in general, I will have something to say hereafter.

Correspondence.

PARIS, March 24, 1868.

EDITORS LANCET AND OBSERVER:—The following cases will give in brief some of the views and practice which may be observed here:

Amputations of the Thigh.—Since the first of November, I have had an opportunity of observing the results of seven cases of amputation of the thigh, and in most of the cases saw the operation. Neither the method of operating nor the treatment has been the same, but in some respects widely different. Two of the cases, Nos. 1 and 2, were at Hotel Dieu, in the wards of M. Maisonneuve. His views of pyæmia (toxæmia, septæmia, ichoræmia,) are, that dead, decomposing substances are carried into the circulation by various ways. To prevent the ill effects which fol-

low, to prevent the condition itself, it is necessary to prevent the absorption of poisonous matter.

First, then, to prevent the decomposition of pus and the formation of poisonous matter. This is to be accomplished by the use of antiseptics (alcohol, tincture of arnica, feric acid etc.) employed as a dressing to the wound. To provide against partial failure in preventing the decomposition, and to diminish the supposed cause and conditions of it, the *second principle* is applied by means of the *aspirating apparatus*. The wound is placed in a vacuum more or less complete by means of an elastic bag with a tube and air-pump attached. By this apparatus it is intended to remove the air from the wound, and at the same time the causes of putrifaction which may be in the air. In case the antiseptics should fail in part, and the vacuum should not fulfill perfectly its purpose, it is hoped, by means of the constant suction, to remove the pus and fluids from the wound as soon as they are formed; and also to counteract, by atmospheric pressure, the tendency to absorption by the vessels of the wound. The idea of creating the vacuum, and by this means preventing the contact of air and the supposed cause of putrifaction, was, I believe, first proposed by M. Guerin, of Hospital Saint Louis; but the apparatus for removing the fluids from the wound, and preventing their absorption by the uniform and constant compression maintained by the *aspiration*, was an addition by M. Maissonneuve.

This addition is accomplished by means of a large glass jar, into which the tube from the elastic bag empties, and from which issues another tube to which latter the air-pump is attached. The jar receives the fluids as they issue from the stump, and offers a larger space in which to produce the vacuum more or less complete. The apparatus may be applied in amputations, compound fractures, etc.

Case 1. Male; aged thirty-nine. Admitted to the wards of M. Maissonneuve Hotel Dieu, September 28, 1867, with white swelling of the right knee-joint. On October ninth, amputation of the thigh was performed about the middle. The *aspirating apparatus* was applied. The patient was very unruly. The bone became exposed and the end necrosed. February 18, 1868, the bone is entirely covered. The stump is very pointed.

Case 2. Female; aged sixty-four. Admitted to the wards of M. Maissonneuve, January 28, 1868, with extensive suppurative inflammation of left knee-joint.

Feb. 11. The thigh was amputated about the junction of lower and middle third. Flaps were made antero-externally and postero-internally. The bone was divided about the point of transfixion. The vessels were ligated and the ligatures all cut short. The wound was washed first with water, then with "pure alcohol." No sutures were applied. The flaps were brought together exactly and maintained with adhesive plasters. The end of the stump was covered with charpie saturated in tinct. of arnica, this covered with broad bandages and roller all saturated with the tincture. Over all was placed the elastic bag of the *aspirating* apparatus.

Feb. 13. The construction was too tight at the upper border, hence a larger bag was selected. Slough may form at the point of constriction, otherwise the stump looks well. No offensive smell.

Feb. 25. Symptoms unfavorable; urine retained bloody; large quantity of urine was permitted to collect in the bladder. Inject a solution of fenic acid.

Feb. 28. The constriction caused by the first bag has produced some sloughing; the wound is now in a state of general suppuration; retention of urine continues; strength declining.

March 1. Died.

I have selected as briefly as possible from my notes on the case. The patient, it must be admitted, was a very unfavorable one, on account of age, and her emaciated and debilitated condition, and the first bag was too narrow at the mouth.

The above are the only two cases of amputation of the thigh on which I have seen the apparatus applied, but have seen the same professor apply it to compound fractures, wounds of joints, and resection of the elbow with very favorable results.

Case 3. Female; aged twenty-one. Admitted to the wards of M. Gosselin, at the Charite October 21, 1867, on account of a large tumor on the inner and posterior portion of the lower third of left thigh.

Nov. 5, 1867, the thigh was amputated. Oval section was made from within outward, and from above downwards. The bone was divided at the lower portion of middle third; wire sutures were applied. At first there was a partial union by first intention, but later it was in a state of general suppuration when it was dressed with alcohol. On January 13, the wound was closed. In February, there was inflammation about the end of the bone,

making it necessary to introduce a drainage tube. March 14, she was using an artificial limb. Discharged March 16.

Case 4. Female; aged forty-nine. Admitted to the wards of M. Gosselin, on account of necrosis of the lower end of the right femur of about twenty years standing. On November 23, amputation of the thigh was performed in the lower portion of middle third by circular incision. No sutures were applied. "When suppuration begins dress with alcohol."

Nov. 29. Died of traumatic fever, not pyæmia properly speaking.

Case 5. Male; aged eighteen. Admitted to the wards of M. Gosselin on account of ankylosis and necrosis of the left knee-joint, especially the head of the tibia.

Dec. 5, 1867. Amputation was performed at the junction of the lower and middle third by circular incision. Dress with wet cloths covered with oiled silk.

Dec. 13. Died.

Case 6. Male; aged sixty-nine. Admitted to the wards of M. Gosselin January 11, 1868, on account of a burn of the fifth degree, extending above and below the left knee-joint seven or eight inches in length, probably involving also the synovial sack. The accident occurred on the fourth, a week before admittance. On the fourteenth the thigh was amputated by circular incision, dividing the bone about the middle. The wound was dressed with charpie saturated with tincture of mur. of iron. No sutures were applied. Bandage was applied up to the groin.

January 19. Died.

Case 7. Male; aged fifty. Admitted to the wards of M. Gosselin January 29, 1868, on account of fungus haematoëdes of the left foot and leg. On March 5, amputated the thigh at the junction of lower and middle thirds, circular incision. No sutures applied. Dressed the wound with the tincture of muriate of iron.

March 24. Doing well. Dressed with alcohol.

Case 8. Female; aged thirty-seven. Admitted to the wards of M. Vollemier, at Hotel Dieu. February 19, on account of suppurative inflammation of the right knee-joint.

March 2. Patient very much emaciated; tubercle of the lungs questionable; gave chloroform. Amputated the thigh, dividing the bone about the middle. Circular operation, cutting down to the bone at one sweep of the knife, then clearing the bone divided it high up, leaving an abundance of flap. Put in deep sutures in the

middle leaving the sides opened. Applied adhesive strips, lint and bandage.

March 16. The wound looks well, some suppuration at each side, but the middle is united, the integument meeting almost perfectly. Dress with adhesive plaster and roller bandage.

March 23. Patient improved in every respect. The case was at first a very unpromising one.

Reduction of Strangulated Hernia by means of Pressure produced by a Bandage of Gutta Percha.

M. Maissoneuve applies this method in all cases suitable for reduction. He says it never fails. If the intestine should be gangrenous or perforated, it would be "criminal" to apply it. I have witnessed the application in

Case 1. Young man. Admitted to the wards of M. Maissoneuve December 9, 1867, with strangulated inguinal hernia of the left side. Taxis was employed, but without success. Symptoms urgent.

Dec. 10. The patient was brought into the operating amphitheater. Chloroform was administered. An ordinary roller bandage was passed around the body above the hips; to this was attached one end of a *gutta percha band* three inches wide and several feet long. The *elastic band* was then wrapped tightly around the neck of the hernial tumor to make a point, or rather ring toward which the force caused by the compression of the body of the tumor would be directed. The band was then wound around the tumor tightly in every direction, continuing from a quarter to a half a minute, then remove. The hernia had disappeared.

Dec. 12. The patient was discharged cured.

Case 2. Old man. Admitted to the wards of M. Maissoneuve March 19, 1868, on account of strangulated inguinal hernia of the left side, of three days standing. Symptoms not very urgent. It had been an old reducible hernia.

March 20. At the morning visit, taxis having been tried previously without success, the *elastic band* was applied as in Case 1, except in the present case, the hernia, scrotum and penis, were included in the band which was applied close to the pubis first; then it was continued over all the included parts. No chloroform was given. When the parts had been covered with three or four thickness of the band, the hernia was reduced.

Perineraphic.

Female; aged thirty-eight. Entered the wards of M. Gosselin, Hospital de la Charite, January 23, 1868, on account of prolapsus of the vagina and rectum. The length of the prolapsed rectum is twelve and a half ($12\frac{1}{2}$) centimeters, has been a long time without reduction. Induration and loss of tonicity of the sphincter. There was a tumor in the abdominal and pelvic cavities, the nature of which could not be made out definitely.

After several examinations of the case it was decided to attempt an amelioration of this most horrible condition of the patient by an operation. On February 6, an elliptical portion of integument, about two inches long and one-half as wide, was removed posterior to the anus for the purpose of preventing the prolapsus of the rectum after its reduction. The lips of the wound were brought together and maintained by means of the quilled suture, with deep stitches of silver wire secured with lead clamps. Small stitches were also applied in the margin of the lips to secure perfect co-apportion, and if possible, to attain union by first intention.

Feb. 14. All the sutures have been removed. The wound is suppurating. The rectum is prolapsed as before. There is a large slough over the sacrum, probably from pressure.

Feb. 19. Died. Post-mortem, internal measurement of uterus, *including the neck*, which was unproportionately long, nine centimeters. Patient has never born a child which should have been mentioned as a part of the history of the case.

The tumor in the abdominal cavity was an "*extra-uterine abdominal non-cystic foetus*" of about seven months. A very rare case. The foetus had been dead some time. The patient was very ignorant, and could not give an intelligent account of the case. I understand the above operation was published in a recent number of the London *Lanceet*, but have not seen it.

Other cases of interest might be added, but I will postpone for another communication.

Respectfully yours,

H. Z. GILL.

The Microscope.—Cryptogami, Etc.

EDITORS *LANCET* AND *OBSERVER*:—No one greater truth was ever written than that contained in an article in the April, 1868,

number of the *New York Medical Journal*, viz.: In the nicer microscopic explorations, we are up to see only those objects and conditions we are in search of.

How many wild theories, vague, baseless pathological hypotheses, have been thrown broad-cast upon a work covered with a little earth, but which when the scorching heat of an unclouded sun has been directed upon the germs developing, have perished. The last five years has been spent by me in an almost unceasing prosecution of the study of pathology, and especially in reference to the *products* of disease and the relation of *cause* to *effect*. The members of the "Union Medical Society" of the counties of Stark, Portage, etc., have yet in mind, I will not doubt, the obligations, I have been placed under to them in furnishing me specimens, as sputa, uterine secretion, urine, etc., from cases.

It has been said that not one microscope in fifty is of any value in the study of pathological histology, which no one will dispute. In this study I have used two different instruments of Grunow; one Oberhauser, two others of French manufacture, besides others occasionally, and have compared many in regard to definition, penetration and the various points pertaining to a well arranged instrument. One day while examining the plate in the back part of Vogel's Pathology, of a microscopic growth supposed to be related to venereal disease, I determined to make a thorough search for the same, or any other *product* or *cause* of disease. The altered epithelium was abundant, and a man with a strong power of imagination could see not only the growth or object he was in search of, but many others quite as beautiful. The epithelium, *partially disintegrated*, furnishes many forms which my eye does not recognize as being possessed of life.

It is said a mariner, long accustomed to the sea, can discern vessels sometimes before a landsman perceives any visible object upon the water. Much longer practice with the microscope may enable me to penetrate further into an epithelial scale. During the war large numbers of venereal cases were under my care—in all cases examined, both there and at Alliance and elsewhere. I have been unable to discover any product that does not result from a *non specific* disease.

In an article in the April number of the *Lancet* and *Observer*, 1867, I have expressed my views more at length, and I trust every careful reader of that article will attest its conclusions:

- 1st. That low forms of disease favor the growth of cryptogamic plants by supplying the nutriment they require.
- 2d. That the disease must first exist in order that the nutriment may be furnished.
- 3d. That as effect always follows cause, the growth of a cryptogamic plant, the result of disease cannot become its cause.

In intermittent fever there is *apparently* more truth found in a study of the palmellæ than in most other diseases, supposed to be the result of cryptogamic origin. Yet at Alliance, in 1856, we had more patients shaking with ague, when the thermometer was below zero, and the ground covered with snow, than during the summer when every clod, ditch and street in town was crusted with these plants.

The lower portion of town, early in Spring, was literally a crust of palmellæ. No ague existed there, while on the ridge above town nearly every family suffered, though no palmellæ could be found.

We can not regard these matters settled by a few observations, or *many* made by a few observers. The history of cerebellar circulation shows us how man when he enters upon a series of observations to prove a point, *will prove* it. Thus Kellie proved to all professional men, at one time, that the quantity of blood within the brain, could not be affected by depletion, or change of posture. How is it with this subject to-day? Let us enter upon any pursuit with all the enthusiasm we are capable of, but conclude with exceeding deliberation and moderation lest we discover that *we too* may be mistaken.

D. A. MORSE, M. D.

Bloomingsburg, O., April, 1868.

Editor's Table.

THE UNIVERSITY OF MICHIGAN—HOMEOPATHY.—It is known that for a year or so past some over-wise experimenters have sought to engraft *homeopathy* upon the medical department of the University of Michigan. Hitherto their efforts have been successfully resisted, *i. e.*, the Regents have steadfastly regarded the hon-

sst good wishes of the medical department, and declined legislative aid based upon debasement. They have, however, yielded at length, and we give the details so far as we learn them, only premising that there is some question whether this action of the Legislature of Michigan is entirely instigated by the interests of homeopathy or antagonism to the permanent fixture of the medical department at Ann Arbor.

"The Legislature, last winter, provided for a State appropriation of about \$18,000, conditioned upon the organization of a homeopathic school in connection with the present medical department. The Board of Regents accepted the terms, and by resolution created the Michigan School of Homeopathy to be located at such place, suitable in the eyes of the Regents, other than Ann Arbor, as shall pledge to the Board of Regents, by June 29th next, the greatest amount for the building and endowment of said school. The resolution also appointed Dr. C. J. Hempeil of Grand Rapids, Professor of Theory and Practice of Medicine in said school, and provided for the appointment of another professor before the commencement of the first term; the salaries of each being \$1,000. There is also appropriated \$3,000 more for the support of the school, and such other professors will be appointed as may be necessary."—*Chicago Med. Journal*, April 15.

We understand that Prof. Armor and Prof. Ford, have promptly resigned their positions in the medical department, in view of this action of the Regents. And we can scarcely believe that the miserable pittance of salary, which professors in the medical department receive, will induce any of the respectable gentlemen of the Faculty to continue their relations to the school. If the medical department of the University of Michigan is to be given over to the control of homeopathy—so let it be fairly understood, let there be a fair and honest showing of hands, and let us see where men stand. Of course, under the present aspect of affairs, the American Medical Association must promptly refuse to recognize this institution, and all respectable medical schools throughout the country must henceforth refuse to recognize the tickets of this college as any part of a course of instruction preparatory to the degree of Doctor of Medicine.

MEDICAL STUDENTS—PROGRESS.—A correspondent of the *Western Medical Journal*, (Prof. Parvin,) has the following, showing the marked change in the appearance of medical students now

as compared with the *past*. "I was indeed forcibly struck with the grand difference between the medical students of eight or ten years ago and those of to-day. I mean *personal* or *material*, or whatever you choose to call it. As I was walking in the procession the other day, as an alumnus of the dear old university, I was almost startled to see that change—thank God—for the better the *much* better, if I can so phrase it, as the long list of graduates, dressed neatly, tastily, in a word, as *gentlemen*, each with head erect, and glancing intelligent eyes, my heart swelled within me with pride. This was an evident *elevation in standard*, literary and social, an end so devoutly hoped for by the public, and prayed for by all the *good* men of our profession. How different was the scene presented, even when I graduated, not so long ago by any means. Then, if indeed there was not a majority of such men, certainly there were enough long-haired, long-whiskered, big-caned, green overcoated, cigar-smoking young men to have done credit to Pike's Peak or to the mines of the Wachita. It is to be devoutly hoped that the days of the *rowdy* medical student have been numbered; that that strange uncouth nondescript may speedily be fossilized and then numbered with 'the things that were.'"

DYNAMICS OF INFLAMMATION.—The views of the powers or forces of inflammation, contained in the essay of Dr. McElroy, a new contributor to our pages this month, though not entirely new, will be found sufficiently novel and revolutionary to provoke thought on the subject by most of our readers. The why's and wherefor's of Hughes, Bennett and Chambers, treatment of pneumonia and other inflammatory conditions, are made sufficiently obvious, and will no longer rest on their dictum and experience, but will be found to have sound philosophy, pathology and therapeutics, as a basis. Some of the facts are not new to us, but the philosophy mostly so. Yet so fully in accordance with most practitioners misgivings and experiences, as to be accepted at once as ultimate truth.

The promulgation of such views marks an era in the progress of practical medicine, from an empirical art, depending on memory and individual judgment, to a grand science with well established principles to guide all its votaries in its application at the bed-side.

EARLY AMERICAN MEDICINE.—The first medical college established in the United States was the Medical Department of the University of Pennsylvania. The first lectures were given by Dr. Shippen on Anatomy, Dr. Morgan on the Institutes of Medicine, Dr. Kuhn on Botany and *Materia Medica*, and Dr. Benjamin Rush on Chemistry. These were the first medical lectures given in America, now just about one century ago, the venerable university having recently celebrated its one hundredth anniversary. Dr. Draper remarks that "the institution thus commenced, continues to occupy an increasing sphere of usefulness and honor to this day."

The same learned and industrious author has collected many interesting reminiscences of early medicine. He writes in his "Civil War," that "William Bull, a native South Carolinian, it is said, was the first American who obtained the degree of Doctor of Medicine; he was a pupil of Boerhave, and graduated in the University of Leyden, in 1734, his inaugural thesis being "de colica Pictonum." Lining (1753,) gave the first American description of yellow fever, and carried an electrical apparatus to Charleston. Chalmers wrote on the weather and diseases of South Carolina. Catesby published the natural history of Florida, Carolina and the Bahamas; he was occupied from 1712 to 1748 in the preparation of his work. In Virginia, Tennant (1740,) introduced snake root (*Polygonatum senega*,) into the *Materia Medica*. Clayton, a native of that colony, published his *Flora Virginica*; and Mitchell, who resided on the Rappahannock, wrote so well on the effects of climate upon the human complexion that his essay was published in the transactions of the Royal Society; he was the author, also, of papers on the preparation of potash and its compounds, and on the force of electrical cohesion."—*Draper's Civil War in America, Vol. I., p. 247.*

Death of Dr. J. F. Potter.—Dr. Joseph F. Potter died at his residence in this city on the 5th of April, ult., at the early age of fifty-nine, and after a protracted illness and great suffering from valvular disease of the heart. Dr. Potter was a native of Maine, and came to Cincinnati about twenty-two years ago. Shortly after establishing himself in this city, he became involved in certain professional difficulties which alienated many of the physicians from personal relations with him, and materially affected his

position here. Nevertheless, Dr. Potter enjoyed a large and lucrative practice, and left a handsome fortune which, we learn, is bestowed after the death of his widow and some other members of the family, to the founding of a school in his native village in Maine.

DR. S. A. SIMPSON, formerly of Ohio, died in Somerset, Penn., on the 26th day of August, 1867. Dr. Simpson graduated in Cincinnati shortly before the out-break of the war, and served as surgeon with credit to himself. He contracted chronic diarrhea while in the service, which ultimately caused his death. His age was thirty-one years.

THE RICHMOND MEDICAL JOURNAL is one of the ablest of our present exchange list; certainly few, if any, medical journals have so large an amount of editorial labor bestowed upon them. Should any of our subscribers desire to add this to their lists of journals, it will be afforded for three dollars a year, the regular price being five dollars.

Anatomy and Histology of the Human Eye.—We are pleased to learn that our friend, Dr. Metz, of Massillon, is engaged in the preparation of a work with the above title. Dr. Butler, of Philadelphia, will be the publisher. We understand the work will be issued very soon.

The Commercial Hospital of this city is being pushed rapidly forward toward completion, and will be one of the most superb edifices in this country. By recent act of Legislature it becomes *The Cincinnati Hospital*.

We neglected to say heretofore, that Dr. Guthrie of the staff of resident physicians, is retained another year as chief resident, and Drs. Gundrum, Jepson, Kellar and Cleveland, after a full and rigid examination by the staff, were elected resident physicians for the year.

Miami Medical College.—The vacancy created in the Chair of Chemistry, by the resignation of Prof. Chapman, has been filled by electing Sidney A. Norton, A. M., as Lecturer on Chemistry.

Mr. Norton has been engaged in teaching chemistry for the past ten years, and brings to the position a fine reputation as a clear and attractive lecturer. He will fit up the laboratory with the view of giving special instructions and demonstrations in practical and analytical chemistry to such members of the class as may wish to devote particular attention to this department.

Fougera's Cod Liver Oil.—During the past autumn and winter, a trial was made at the out-door department of Bellevue Hospital of the Iodlnized Cod Liver Oil, prepared by Mr. Fougera of William Street, with the view to ascertain whether or not this oil possessed any advantages over the ordinary uncombined cod liver oils. Before giving the results it is fair to say that no other kind of practice presents so few facilities for forming a decided opinion of the merits and efficacy of any medicine as that of a dispensary. In a hospital the physician has the assurance that his directions in regard to the administration of the medicine will be faithfully carried out, and has moreover generally an opportunity of observing the result. In private practice also he has this latter advantage, though not always the former. In a dispensary practice he has neither. The medicine may or may not be properly administered. If the patient recovers he generally thinks it unnecessary to come back to the report cure; if he thinks he is not improving he will probably change to some other dispensary, and the case is lost. An opinion must be formed from the few cases that continue under treatment throughout the case, or by observing whether the patient has improved from visit to visit, though the cure was yet incomplete. The advantages claimed for Mr. Fougera's cod liver oil, are that by reasons of the addition of iodine, bromine and phosphorus, it is more efficacious, and at the same time the stomach need not be disorded by any excessive amount of oil administered. This oil was given to about eighty patients, about thirty of whom were children, the remainder belonging chiefly to the department of chest diseases. Owing to the difficulties above mentioned, no statistical account of the result can be given; but the opinion of the physicians using it is nearly unanimous to this effect: that the oil is of decided medicinal value; that compared with ordinary cod liver oil, it appears to take effect more rapidly; and that it obviates the very common necessity of adding extemporaneously to the

oil, medicines containing iodine or iron, particularly the syrup of the iodide of iron. In private practice, where the price of the article used is not of much importance, it would be worth while to give this preparation a trial.—*N. Y. Med. Gazette.*

Death of Prof. Wm. Gibson.—Died, March 2, at Savannah, Georgia, aged eighty three, Wm. Gibson, M. D., Emeritus Professor of Surgery in the University of Pennsylvania. Dr. G. was a highly educated, experienced and skillful surgeon, and a most attractive and excellent lecturer. As the successor of the illustrious Prof. Physick in the surgical chair, he had a most trying position to fill, but he proved himself equal to the task, and gave general satisfaction by the clearness and earnestness of his teaching, and numerous drawings and preparations with which he illustrated his lectures.

Bellevue College—Dr. J. R. Wood.—At the annual meeting of the faculty of the Bellevue Hospital Medical College, held at Delmonico's last week, a note was received from Dr. James R. Wood, resigning his position as Professor of Operative Surgery and Surgical Pathology in that college. At a subsequent meeting Dr. Wood was elected Emeritus Professor of Clinical Surgery, and Professor W. H. Van Buren was made Professor of the Principles of Surgery. We understand that Dr. Wood will continue during the winter term, the course of clinical instruction in which he has, for many years, been engaged with so much success. The college is fortunate in retaining in this manner the services of one to whose energy its foundation was in great part due.—*Medical Gazette.*

DR. ROBLEY DUNGLISON, for many years Professor of Physiology in the Jefferson Medical College, Philadelphia, has just resigned this position which he has occupied with so much credit. Perhaps no physician in the United States has published so many works upon such various medical topics as Dr. Dunglison; and many of them have been standard text-books in our schools of medicine. Prominent among the candidates for the position thus vacated is Dr. S. Weir Mitchell, of Philadelphia. Dr. Mitchell's reputation as a physiologist, and especially as a careful and accurate observer, is well established, not only in this country

but abroad. No one we think could be found calculated to reflect more honor upon the Chair and the college. We hope, therefore, to soon hear of his election to the position.—*Medical Gazette.*

To Army Surgeons.—If this meets the eye of the Surgeon who was in charge of Cumberland Hospital, Nashville, Tenn., July, 1865, he is respectfully requested to send his address to Susan Stahl, widow of Samuel Stahl, formerly of Company B, 51st O. V. I., who died at the above named hospital, July 12, 1865. And if this is seen by Sergeant S. M. Doherty, who was present when Mr. Stahl died, he will please send his address to Mrs. Stahl. Evidence is wanted of Stahl's death to enable his widow to have a pension allowed. As she has a family of small children dependent on her, it is hoped any one who can assist her to the necessary evidence will do so.

Address Susan Stahl, care of D. Longnecker, Covington, Miami County, Ohio.

Reviews and Notices of Books.

Atlas of Venereal Diseases. By A. CULLERIER, Surgeon to the Hospital Du Midi, etc. Translated from the French with notes and additions, By Freeman J. Bumstead, M. D., Professor of Venereal Diseases in the College of Physicians and Surgeons. New York. With about one hundred and fifty beautifully colored figures on twenty-six plates. Philadelphia: Henry C. Lea, 1868.

We have received Parts I and II of this magnificent Atlas of Venereal Diseases. It is to be completed in five parts, printed in this elegant style with the finest illustrations of syphilis, which have ever appeared in this country; each part is sold at three dollars. As introductory to the subject we have a history of venereal diseases, together with past and present doctrines concerning its nature. Next Blennorrhagia is treated of, with such complications as orchitis, prostatitis, ophthalmia, etc. This completes *Part First*. *Part Second* continues with the blennorrhagia of women.

metritis, ovaritis, etc., consequent on the primary affection, and vegetations. The consideration of soft chancre (what Bumstead calls the chancreoid,) is commenced. Each of the parts before us is beautifully illustrated with colored lithographs, showing every form of the disease as treated of.

When complete, this translation of Cullerier will afford those who are particularly interested in this speciality, a full and desirable text book.

The American translator of this work, Dr. Bumstead, is well known as one of our ablest syphilographers and practitioners. His own work being accepted as high and convenient authority. He does not always agree with Cullerier, and has here and there added in brackets, his own peculiar opinions. Thus on the question of the soft chancre, Dr. B. believes that chancre and *soft chancre* are as distinct as chancre and gonorrhœa. So he expresses the diseases as gonorrhœa, chancreoid and chancre. This idea is incorporated fully in the opening of the chapter on soft chancre. For sale by R. W. Carroll & Co., and Robert Clarke & Co.

A Practical Treatise on Diseases of Women. By T. GAILLARD THOMAS, M. D., Professor of Obstetrics, Etc., in the College of Physicians and Surgeons of New York City, Etc. With two hundred and nineteen Illustrations. Philadelphia: Henry C. Lea, 1868.

New works pertaining to the treatment of the Diseases of Women, just now particularly claim the attention of the profession ; and of all those which have recently appeared, we have seen none more worthy of favorable notice than this new and elegant work by Prof. Thomas.

Of course the diseases considered by our author are those usually embraced in a treatise like the present, that is to say, those diseases which are peculiar to women. But the style and arrangement of the text are fresh, well condensed and readable. What we particularly note, however, is the large amount of new suggestions in the therapeutics of the subject, that our author has carefully collated and presented to the reader. Many of these new remedies and modes of treatment have been heretofore presented, scattered through journals, but now made permanent and easy of access to the busy practitioner. Whenever nee-

essary illustrations have been freely employed to make the descriptions of appliances perfectly plain and intelligible.

Prof. Thomas has enjoyed superior opportunities for the cultivation of this department of the profession, as one of the physicians to Bellevue Hospital, and he appears to have improved these advantages. The book is a good one and will be well received by the profession. For sale by Robert Clarke & Co. Price. \$6.

Chart of Venereal Diseases. By PHILLIP RICORD, of Newark, New Jersey.

Dr. Ricord adopts the classification of venereal diseases, now largely entertained of *chancre*, *chancroid* and *gonorrhœa*, and has prepared a chart of the subject in the form of a tree, three main limbs representing the varieties of the disease ; the smaller branches elaborating three doctrines pertaining to its steps of progressive symptoms and characteristics. The chart is for sale by the publishers, Wm. Wood & Co., of New York.

A Manual of the Dissection of the Human Body. By LUTHER HOLDEN, F. R. C. S., etc., with Notes and Additions by ERSKINE MASON, M. D., Demonstrator of Anatomy at the College of Physicians and Surgeons of New York City. Illustrated with numerous engravings. New York : Robert M. Dewitt.

From a somewhat hasty examination of this book we are well pleased with it. The directions for the dissections are given clearly, and the description of parts are satisfactory. If we have any objections to the book, it is that the descriptions and general text are so elaborate as to make a bulky volume for the dissecting room. All the structures of a complex character are illustrated with wood-cuts, which are sufficiently clear, though not of the best—certainly not so good as the illustrations in Grey. One feature we think a very convenient one, is found in the latter portion of the book ; the arteries, veins, nerves and muscles, are severally arranged in the tabular form, any particular group being at once in view, and any individual being thus readily called up in its proper name and position. For sale by Robert Clarke & Co.

Odontalgia, commonly called Toothache; its Causes, Prevention and Cure. By S. PARSONS SHAW, *Necesse habeo scribere, et dicum ut sentio.* Philadelphia; J. B. Lippincott & Co., 1868.

If this little volume really tells us what are the causes, prevention and cure, of toothache, its author will have conferred a great boon on the human race, and his book will be the most acceptable of the day.

Perhaps it would scarcely be fair to say that the author has literally succeeded in presenting a book fulfilling these promises, but if not, he has probably come as near to it as the nature of the case will admit. We find, at any rate, a great deal of useful information upon these topics compressed in a small space. The anatomical points in regard to the structure of the teeth, ought to be familiar to every physician, but it will not hurt to remind afresh; while the differential diagnosis of different forms of toothache and the proper treatment, is a sort of knowledge with which physicians are not generally familiar, and the directions are such that we think every one liable to be called upon, either as physicians or surgeon dentist, will be profited. For sale by Robert Clarke & Co. Price, \$2.

The Endoscope, and its application to the Diagnosis and Treatment of Affections of the Genito Urinary Passages. Lessons given at Necker Hospital. By A. J. DESORMEAUX. Translated by R. P. Hunt, M. D.

This interesting monograph was originally translated for the Chicago Medical Journal, from which it is now reprinted. Those interested in the use of this new means of physical diagnosis will find this a readable resume of the matter. This book may be obtained by addressing Dr. J. Adams Allen, of Chicago.

Abstracts and Selections.

Letter from Paris.

You must have remarked how busy death has been among the renowned names of our profession. Lawrence, Faraday, Rostan, Troussseau, Velpeau, all have departed in a brief period from the

scene of their labors. Faraday, though not a physician, had connected himself to the profession by his applications of electrical science to medicine, in a way to rank him among the contributors to medical science. Foremost among the physicists of his day; his name will go down to future ages in British history, along with those of Sir Isaac Newton and Sir Humphrey Davy. In his hands the science of electricity has received a new monenclature and a new form, and in this field, as well as in the charm of his popular discourses, he has hardly left his equal behind him.

His countryman, Sir William Lawrence, who died on the 15th of July, at the advanced age of eighty-four, was not less distinguished among the surgeons of his time. Sir Willlam, after spending seven years and a half at a classical school, was apprenticed to Mr. Abernethy, in whose house he became an inmate, and so impressed was his teacher by the zeal and talents he displayed in his anatomical pursuits, that in the third year of his apprenticeship he appointed him demonstrator of anatomy. For twelve years he continued to labor in this position. In 1813 he became assistant surgeon to St. Bartholomew, and was not full surgeon till 1824, when he was forty-one years of age. In 1815 he was chosen one of the professors of anatomy to the Royal College of Surgeons, at which he delivered the lectures for four years. His connection continued with St. Bartholomew's until nearly the time of his death. For a long period he was also connected with the Eye Infirmary at Moorfields, and was surgeon to the Royal Hospitals of Bridewell and Bethlchem. Few professional men, in fact, have held office in more public institutions, and rarely has an officer discharged his duties with greater ability. Yet he has not escaped censure, and more than once he was involved in exciting controversies with his colleagues and the officers of hospitals and colleges. On one ocession, when delivering the Hunterian Oration before the College of Surgeons, his line of remarks produced a storm of indignation in his auditory. He had undertaken to defend some unpopular acts of the Council of the College, which he had been heard years before fiercely to denounce. The indignation of those surgeons who had lis- tened to him then was intense, but the orator was unmoved in the fiercest of the storm, and his eloquence finally triumphed. When he had allowed his audience to exhaust their displeasure, he proceeded to conclude his address in a peroration which called forth the plaudits of his auditory.

Sir William Lawrence had a more unfortunate controversy with his old friend and perceptor, Mr. Abernethy. In a course of lectures which he delivered before the College of Surgeons on the Natural History of Man, he advocated doctrines not deemed orthodox, and Mr. Abernethy replied to them, attempting to show that they favored materialism. But the blunt, conscientious old surgeon, was no match in eloquence and power for his former pupil. Lawrence triumphed as a controversialist, but was defeated in the end. The discussion attracted public attention to the obnoxious doctrines, and he was called upon by the authorities of Bethlehem and Bridewell Hospitals to resign his appointment at those institutions. He did not reign, however, but recanted, and, what is still more damaging to his character, bought up all the copies of his condemned book and sent them over to America. The cordiality between him and Mr. Abernethy was never restored.

It is painful to refer to these shortcomings of a man so distinguished for his talents and for his honorable labors as a surgeon, but it is due to the truth of history that the foibles of his character should be given along with its elevated qualities. Nowhere in the civilized world will any surgeon hear of the death of Sir William Lawrence without feeling that one of the great lights of surgery has gone out. Few British surgeons have written more extensively, and on all the subjects of which, he has treated he has written ably and well. I make no exception of the unlucky volume which called forth the fierce animadversions of Mr. Abernethy, and I believe after men have had leisure impartially to examine its doctrines, they will generally agree in acquitting it of those infidel tendencies of which it was accused when it first appeared. Certainly it is a volume of unusual force of thought and eloquence of style, and places its author among the foremost thinkers of his age.

As an orator, those who have heard Sir William Lawrence, agree that in manner, substance and expression, he had hardly a superior in Great Britain. As a surgeon, he was placed by public opinion at the head of all his predecessors at St. Bartholomew's, the illustrious Pott alone excepted. As an operator, though surpassed by Cooper, and it may be by a few others, he ranked amongst the most dexterous of his day. And if in his public life his course sometimes gave color to the charge that "his principles were somewhat lax, his heart somewhat cold," no one who

knew him personally will deny that in all the relations of private life he was most estimable and affectionate. I can never forget the cordial terms in which I have heard his warm hospitality, his blandness and courteousness of manners, his interest in young strangers, and his kindness to his patients, described by our young countryman who bore letters of introduction to him.

The face of Sir William Lawrence denoted intellectual power. His forehead was high and broad, his mouth large and expressive his chin massive, indicating firmness of will. His eyes were blue, inclining to grey, and suggested the idea of coldness and sagacity. He had a vigorous frame, well-developed, and was in person above the middle height. Early in life he suffered from an attack of facial paralysis, which distorted his features for a time, but he obtained relief from it by abstinence and the loss of blood. Several times afterwards he had paralytic seizures in different limbs, but they yielded without treatment to the force of his excellent constitution. About two years ago his powers of locomotion became seriously impaired, and he was threatened with hemiplegia, but after a time he rallied so far as to resume a portion of his professional duties. At last the brain gave away, he became suddenly hemiplegic on the right side, and lost the power of speech. He broke down in the Council Chamber of the College Surgeons. Despite the affection of the brain, which palsied his right side, his splendid intellect remained unimpaired to the last, and though unable to utter his thoughts, he manifested a pleasure in the conversation of his family and the friends admitted to his bed-side until within a few hours of his death.

Sir William Lawrence lived in a style which in our country would be called princely. He was more fortunate or more wise than his renowned cotemporary, Sir Charles Bell, who with all his rare ability died poor and almost broken-hearted. He emulated that other great light of British surgery, Sir Astley Cooper, who, with his great honors, accumulated also great wealth. The country seat at which Sir William spent his evenings was described many years ago by a near relative in a letter from London to the *Louisville Journal*. My kinsman was then a young man pursuing his medical studies abroad, and after speaking of the address and personal appearance of Sir Lawrence, he went on to say: "I found Mr. and Mrs. Lawrence in one of their most splendid green-houses. This was the first country seat I had visited in England, and truly I can say I never set foot on a more

lovely spot. Mr. L's entire possessions embrace about fifty acres, and cost him a fraction under \$175.000. You approach the house through rows of ancient and full-foliaged elms, whose branches almost sweep the ground. Entering the hall, you find yourself surrounded on all sides by statutes of Apollo, Diana, the Graces, etc. On your right is the superb library, the entire side of a room fifty feet long covered from the ceiling to the floor with choice and elegantly bound books. Standing in front of the green-house I enjoyed one of the most enchanting views that I ever expect to behold. The conservatory, with its many thousand feet of glass, and flowers filling the air with fragrance; the statues of the divinities cast in metal or cut in marble; the fountains throwing up their jets of clear water in the same; the stately mansion, the venerable elms, the lake, the grottoes, and the grand old cedars of Lebanon form a picture of surpassing beauty and magnificence."—*Richmond Medical Journal.*

Carbolic Acid in Burns.

PROFESSOR WILLIAM PIRRIE, of the University of Aberdeen, recommends carbolic acid and olive oil, in the proportion of one to six as an application to burns. He relates in the *Lancet* the case of a delicate girl eleven years of age, whose face, neck, side, back and arm, were severely scalded by boiling water. Two folds of surgeon's lint were soaked in the carbolic acid, and oil applied over the whole surface, tin foil being placed above the lint to exclude the air. In ten minutes the patient was free from pain. On the second day the skin was greatly improved, and the bullæ, which had formed, seemed withering away. The skin was perfectly healed on the twelfth day, the cuticle having been thrown off. Not a drop of pus formed during the treatment.—*Pacific Medical and Surgical Journal.*

Musical Bullet Probe.

AT the Paris Exposition there was exhibited a probe for announcing audibly the presence of a bullet in a wound. If the points of the instrument came in contact with a metallic body, an electrical circuit was made and a small bell rang. An ozone generator was also exhibited, made of flat plates of glass coated with tin foil and electrified by a Ruhmkoff coil. A stream of air driven through the apparatus came out so highly charged with

ozone as to be irrespirable, and possessing the power of bleaching paper, linen, soiled engravings, and so forth. This discovery is spoken of as likely to be of much practical value in the arts.—*Pacific Medical and Surgical Journal.*

Business Notices and Acknowledgments.

NEW BOOKS.

Wood—Therapeutics and Pharmacology J. B. Lippencott & Co.

Holden—Manual of Anatomy. R. M. Dewitt.

Shaw—Odontology. J. B. Lippencott & Co.

Many New Advertisements and changes in advertisements will interest our readers.

Indiana State Medical Society, remember the meeting at Indianapolis on the 19th of May.

LIFE OF GENERAL GRANT.—We have received advanced sheets of a life of General U. S. Grant, By Hon. H. C. DEMING, and published by the National Publishing Company of this city. As General Grant is the "coming man," our readers will be glad to avail themselves of everything pertaining to his career. The author, as a member of the Military Committee of the Thirty-Ninth Congress, enjoyed peculiar facilities for obtaining material for his work, and we doubt not from the specimen before us, it will be attractive and readable. As it will be sold only by subscription, agents will find good opportunity for employment as canvassers, by addressing the National Publishing Company, of Cincinnati.

To SUBSCRIBERS.—As soon as bills can be made out, they will be forwarded to all those who are in arrears, either for the past or the current year. We shall be greatly obliged, however, if our friends will not wait for a dun, but remit their dues at their *very earliest convenience*.

SPRAGUE & Co, on the corner of Vine and Fourth, opposite the Post Office, is the place to get *suited* in clothing of every kind, and at the lowest figures. For particulars of their new arrangements and facilities, see their card in our advertising department.

THE DIAMOND DICKENS.—While the great author has been amongst us, we have, perhaps, been tempted to over-look, for a time, the regular issue of this beautiful edition of his creations. We have before us *Oliver Twist, Notes for General Circulation, Christmas Stories and Sketches*, by Boz. This neat and cheap edition continues with the same uniform beauty as characterized the first volume of the series, and to which we have alluded several times during the past few months. Two more volumes complete the sett. Price, Illustrated, \$1 50; plain \$1 25.

HARPER'S MONTHLY MAGAZINE.—The number of this old popular magazine for May is before us, completing the thirty-sixth volume. Eighteen years of interest and attractive usefulness make this one of the American institutions.

PALMER'S ARTIFICIAL LEG.—We desire to sell an order for one of Palmer's Artificial Legs, and will be pleased to communicate with any person interested.

FOR SALE.—One of the best county locations for a physician in Ohio. Improvements consisting of a two story brick house, thirty-five by forty feet; barn, carriage house, corn-crib and other out-buildings, and two lots of ground, all in good repair, for \$1,200; \$400 to remain in property if desired. Immediate possession. Address,

J. A. KIRKPATRICK,

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DR. THOMAS C. HENRY,
FORMERLY (1852—1860) OF THE REGULAR ARMY,

174 West Fourth St., Cincinnati.

NOTE—SPECIALTY.—Laryngoscopy and Diseases of the Air-passages by the German method. Dr. H. also examines candidates for admission into the Army Medical Staff.

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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Original Communications.

ART. I.—*Reflex Action.*

Read before the Butler County, (Ohio), Medical Society, April 2nd, 1868.

BY H. BEAUCHAMP, M. D.

MR. PRESIDENT: There are but few subjects of more interest to the medical profession than that of reflex nerve action; the pathology and therapeutics of which I propose to trace in as connected a manner as I can, and as briefly as possible, consistent with your time and patience, not wishing to encroach upon the hours allotted to the other business of the society.

By reflex action I propose to mean that nerve agency whereby an irritation in a part or in an organ, may be reflected to other parts or organs, without any structural change taking place in the media of translation.

The study of the phenomena of diseased action or functional disorder, as shown in the many peculiar and oftentimes extraordinary symptoms manifested by these reflex actions in the nerve system, is of both interest and utility to the medical practitioner, as it is through this channel that he often combats the most dangerous disorders that he is called to encounter in his professional career.

We are all, perhaps, conversant with the physiological experiments that exhibit this action of the nerves in the lower animals and in the human subject, but we often fail to recognize the same system conveying morbid impressions during the course of organic structural diseases, as well as in those of functional dis-

order, and allow ourselves to be puzzled for days, to account for symptoms that appear irrevelant to our case, when by looking to the nervous connections of the organ or parts affected, we would find that the peculiar and apparently inconsistent symptoms were derived from reflected irritation in remote diseased parts, and that the manifestations that present themselves stand between and obscure the original affection, thereby calling our attention away from the true seat of morbid action.

The subject of this paper was suggested by the history of a case, related by Dr. Smith at our October meeting of last year. His patient appeared to have died from exhaustion, consequent upon an irritation of the stomach, reflected to the heart, lungs and diaphragm; and from thence to the cerebro-spinal system, through the sympathetic. His case seemed to prove conclusively that an irritation started in one organ can bring into diseased or abnormal action, the greater part, if not the entire nerve system, through reflex action, and ultimately will cause death by pure exhaustion of nerve power.

The parts of the nerve system more particularly brought into play in these reflex phenomena are the nerves emanating from the spinal and sympathetic systems and Medulla oblongata. But I do not wish to be understood as ignoring the fact that the brain may sometimes be affected in these morbid manifestations, as I can readily admit that we have examples in which that organ forms a part of the circle, (as instanced in the course of its own inflammations, irritations, &c., and in cases of convulsions caused by fright or other mental causes acting upon a highly sensitive organization.) In cases of general convulsions with a partial loss of consciousness, I have the belief that the brain is only secondarily affected, it being in part a link, in part a radical, as where the entire muscular system is affected; as in tetanus, in which disease we have irregular action of both the voluntary and involuntary muscles, the heart, lungs and other visceral organs and blood vessels also being affected in the general spasm.

When we come to examine the great sympathetic nerve with its many plexes, and observe their free connections with other nerves and with each other, we can readily understand how irritations in any organ, supplied from that source, can be the means of giving rise to symptoms in other parts or organs apparently anomalous, and we can also see the channels through which remedial agents may pass in their course of therapeutical action.

Reil, Bichat and many others claim that these ganglia of the Sympathetic are for the purpose of rendering the organs they supply independent of the will. Yet we cannot deny the fact that this nerve is also a connecting medium between the brain and the viscera of supplies.

While at this point one instance to support the theory that the brain need not be affected or interested in these reflex phenomena has come to my mind. It is that of the act of parturition, in which we have a reflected action calling into sympathy the muscles of the chest, diaphragm and abdomen, (even though the patient be fully under the influence of chloroform these parts act in perfect synchronism, the ether merely abolishing sensation and voluntary motion, attributes of the sensorium.) One great center from whence irradiate irritations, and through which we direct remedial means is, no doubt, the solar plexus, filaments from which accompany the coronaria ventriculi, hepatici, splenici, spermatic, superior and inferior mesenteric and hypogastric arteries, and are distributed to parts supplied by these vessels. By bearing this in mind we can account for the nausea and great prostration produced by injuries of the visceral organs and testicles.

I will now mention some familiar examples of reflex morbid action that we are called to witness, and will briefly trace a part of them through their nerve channels, from the point of departure of the irritation to the parts in sympathy. But first I will say that in order to examine an individual case, we must look to the structure of the part affected, examine its connections with other parts or organs, (as an integrant of a system,) and must make ourselves familiar with all its nerve communications, before we can intelligently understand the peculiar translated symptoms displayed in the diseases of many of the organs of the human body, particularly in affections of the brain, stomach and uterus.

We can readily trace from cause to effect, the symptoms manifested in traumatic tetanus, and can see the nervous system worn out by exhaustion until death ensues. But when a child in perfect health, is rapidly taken off by convulsions, caused by a few cherry-stones, we often fail to recognize, at once, the same course of reflections from the local cause, (irritation of stomach,) to the general system manifested by the spasms. Yet here we have the same channels of communication, cerebro-spinal and sympathetic nerves.

In exemplification of this subject, let me call your attention to a case that came under my personal notice—a gunshot wound resulting in loss of voice and paralysis of right arm. During the naval engagement off Fort Pillow, between the U. S. and Confederate gun-boats, Captain R. M. Stemball, U. S. N., received a ball in the right shoulder. The missile entered immediately over the smooth, triangular surface of the spine of the scapula, and passed upward and inward, traversing the neck, first between the skin and platysma myoides, then under that muscle and came out in the right side of the neck, near the median line, immediately over and displaying, by loss of structure, the tendon of the digastric muscle and the loup attached to the hyoid bone, through which it plays. The tract of the wound was not so deep that in the course of the ball it could have been near enough to the nerve of the arm or vocal organs to have wounded them, but by reflex action the shock was conveyed to those parts through the supra-scapula, recurrent laryngeal, superior laryngal and external spinal accessory nerves.

We have familiar examples of reflex action in *tic doloreux*, from carious teeth; pain in the knee in hip diseases; irregular nervous phenomena in diseases of the womb; pain in the glans penis from irritation in the ureters; itching of the glans in affections of the bladder; eruptions upon the skin following and consequent upon the ingestion of some kinds of food; pain in the shoulder in hepatic disorders; sneezing from the effect of light upon the eye; contractions of the uterus from cold applied to the abdominal surface; retraction of the scrotum from pain in the ureter; and finally headache from irritations in the stomach and other organs.

We have a good example of reflex action in the impression made upon the stomach by the sight of a disgusting object, and another by the nausea produced by an offensive odor. The channels of transmission in these cases being from and through the trifacial, thence through the sympathetic, by the naso-palatine (Cloquets) ganglion and spino-palatine (Mekels) ganglia, to the glosso-pharyngeal and finally reaching the pneumogastric. So in the case of nausea produced by an offensive article of ingesta. We trace the connection with the stomach through a branch of the 5th, by way of the lingual branch of the superior maxillary, or the gustatory branch of the inferior maxillary. And here again we have the aid of the sympathetic in the transmission, as it ultimately

connects with the 5th nerve, through Mekel's ganglion and through the median nerve with the gustatory.

So we can trace the reflections both backward and forward, to the stomach, as shown by nausea and vomiting from that organ, as exhibited by pain and irregular nervous action, in parts that are supplied by these connecting nerves. The forward action is well shown by the nausea produced by irritating the fauces with the finger or with a feather. The backward reflection being plainly seen in the pallor, contracted features, cold skin and general depression which follows the irritation of that organ by emetics, &c.

To show how intimately the 8th pair of nerves are concerned in these reflected movements, we have only to look at the order of its branches and to its communications to determine how readily it can convey irritations from point to point. Commencing above, we have the pharyngeal, the superior laryngeal, cardiac, recurrent laryngeal pulmonary, anterior and posterior, œsophageal and gastric; and its connections with the facial, gloss-pharyngeal, spinal accessory hypoglossal and sympathetic minor afford easy channels for transmission. And to show a connection with the sympathetic major, I will mention the fact that singultus followed the administration of the oil of cinnamon, in a case where I had occasion to administer that article. The hickup invariably followed each dose. (six in all, two hours apart,) and lasted a half hour after taking the medicine in which it was combined.

Another example and I will leave this part of my subject. A person receives a blow upon the head, we find the stomach disordered, the heart affected, the bowels emptied either by direct spasm of their muscular coat, or by relaxation of the sphincter. In this case again we find the par-vagum and the great sympathetic affording the lines of communication, aided by the nerves of the spinal tract, which system, with its afferent and efferent nerves, motor and sensorium, plays an effective part in many reflex phenomena.

I have said but little about the great center of the nerve system, the brain, (the fount of nerve power,) nor have I exemplified cases in which it must necessarily be brought into the morbid action, with the exceptions, as when I mentioned cases requiring some voluntary action or which were productive of some local or general sensations; as in the cases where pain is felt and expressed during spasmodic and other irritative diseases. We have in the

nerve systems named ample source for independent action and transmission. Perhaps this view of the subject would give us greater confidence in the use of opiates, nervines, tetanics and anaesthetics, in the treatment of disorders that call for their administration; say in puerperal and infantile convulsions, in tetanus, local spasms, &c., &c. Do not understand me that I propose these agents to the exclusion of other means in all cases, for I know full well that a plethoric condition calls, first, for sedation by perhaps direct abstraction of the circulating fluids, and for other means of depression, before we can resort to the means above named. But in cases where the powers of the system are feeble, then they can come into immediate requisition.

In furtherance of the view that the brain may act the part of a radical, and be in part a link in the communicating chain in reflex actions, I will state that new experiments have resulted in the belief that the vasō-motor nerve fibers of the vessels of the pia-mater partly belong to the ganglionic chain of the cervical part of the sympathetic; part of them enter the superior ganglion, and part take a course above the ganglion, probably in the cerebral nerves.

Vivisectional experiments have shown that violent irritations, (electrical or mechanical,) of the sensory nerves, have caused contraction of the arteries of the pia-mater, even if applied to the course of the crural nerve. A distinct contraction of the arteries of that membrane has been seen to take place, this contraction, after removal of the cause of irritation, was soon followed by dilation. This action must be of a reflex nature; and if spasm of the cerebral arteries is one of the pathological conditions in epilepsy, can we not see how this disease may be of a reflex origin; and also in this way trace the causes of infantile convulsions produced by teething, worms, ingesta, &c., &c.

May not the view of the brain being but a link in the chain of nerve communication, in some disorders, account for the fact that we often fail to discover a trace of disease in that organ after death from affections of convulsive character, even where the head symptoms during life seemed to indicate serious structural changes in the cranium? Here the brain appears to resemble the outer coil of the magneto-galvanic machine, passing the current from the source to the object upon which the electrical power is directed.

You may naturally wish to know what this dissertation has in

view. Most certainly not an intention to open up a discussion upon solidism and humorism, but merely an effort to point to the practical deductions based upon the subject here presented, and to show that many anomalous nervous disorders and metastatic or translated affections, are but natural results of the pathological actions shown by reflex irritation. Hoping to relieve ourselves from doubts in our diagnosis, or from the worry of mind produced by an ignorance of the true features of our case, and finally to present a safe theory from which to form a rational method of treatment in any case under our care.

I will say but little now in regard to the part that reflex nerve action plays, while operating during the causation of disease by the different morbid agents, as I will have an occasion to introduce this part of my subject, when treating of the therapeutical action of remedies and remedial means.

I will merely remind you of the effects of cold applied to the feet, or the general surface of the body, as one of the causes acting by reflection, which are capable of producing inflammations in internal organs, and of giving rise to irritations throughout the entire system, which may be productive of local and general convulsions, and will refer you to other parts of the paper, where the cause of disease was incidentally introduced while treating of special reflex phenomena.

It is in application of remedies to parts within reach, with the expectation of their translated action upon other parts, to which no remedy can be directly applied, that we acknowledge the agency of nerve transmission, or their reflected operation. I do not wish to be understood as adopting the doctrine of exclusive nerve transmission. I am confident that many medicines enter the circulation, and reach parts upon which they display their therapeutical action, even though they may finally do their work through local nerves.

I will mention an example of external remedial means brought to act upon internal organs. It is the instance of the establishment of the action of the heart and lungs in the neonitus immediately after birth, when those organs have refused their office, by dashing cold water upon the face, neck and chest. Another example similar in character is the mode of re-establishing action in the same organs in syncope. In these cases, we reach the organs through the facial, 7th or sympathetic minor, external spinal accessory, gloss-pharyngeal and pneumogastric.

By the use of soothing remedies, such as warm vapor, guttae syrups, anodyne mixtures, &c., in bronchitis, do we not look for their translated action, even as we expect the warm bath to soothe a patient affected with general nervous excitement; emollients to quiet the irritations of the mucus and integumental surfaces; sternuctories to restore respiration; cold douche to awaken the heart's action and the outward application of water to allay inward heat and thirst.

Let me call your attention to the modus operandi of some of our remedial agents by reflex action. Have you not observed that quinine given in solution acts more promptly and with more certainty in smaller doses, than when administered in pill form, impressing, as it does in the fluid form, the gustatory, laryngeal, and pharyngeal nerves, in its passage to the stomach. Take concentrated solution of camphor in 98 alcohol, and administer in five drop doses, and observe the rapidity of its action, compared with its operation when used in the ordinary solution, or in the gum. Here we have a quantity too small to reach the stomach, before the greater, if not the entire part is wasted upon the membranes, over which it must pass, before reaching that organ. Does not hydro-cyanic acid thus act upon the nerve radicals of the mouth and pharynx, and from thence conveyed or reflected directly to the organs of respiration, circulation and innervation? A single inspiration of the vapor of this acid, has caused a person to fall as if knocked down; and a finger applied to the open end of a tube containing the vapor, has been benumbed, and has remained so longer than a day, thus favoring the view of direct reflection and sympathy, perhaps favored by what is termed elective affinity. Is it not probable that the toxocological action of many agents is exerted through reflexion, aided by this affinity. We may, upon this view, understand the reason that some purgatives act upon one part of the intestinal tract, some on another part; how emetics, no matter where introduced into the system, affect the stomach, belladonna the iris, ergot the womb, &c., &c.

Upon the view of partial, and sometimes total exemption of the brain from participation in these reflex actions, can we account for the large doses of opium and other narcotics that have been used and borne in some spasmotic affections, as colic, spasm of the ureters, tetanus, &c., without affecting the sensourium. Here we have the remedy exhausted upon the radicals of the stomach, or directly reflected to the part affected. Enormous

doses are used and wear out, losing all power in some cases. But do we not often display timidity, and unnecessarily withhold opiates, nervines and anæsthetics in cases of general convulsions, when by their appropriate administration we might bring about a good result? Where other means have failed us, have we not regretted that we allowed ourselves to be governed by the fear of brain injury from the use of these remedies?

What we most dread in these reflex nervous translations, as shown by pain, local and general spasms, is exhaustion, and nothing meets the requirements of the case more appropriately than do opiates, anæsthetics combined with stimulants, and with any soothing auxilliary that can be employed. I have said that large doses of the above agents have been used in these cases, but may not the term *large* be in a comparative sense? When we take into consideration their ordinary dose, and reflect upon the amount that we all have administered for relief of local pain, then only can we realize how much of the remedy ought to be exhausted in the relief of the graver affections and can then form some idea to what extent we dare go, in such disorders consistent with reason and safety.

A last instance of remedial power through reflex action and I have done. It is that of the warm bath, in the treatment of local and general convulsions, and in the restlessness that is manifested in many nervous disorders. In the instance of that peculiar perturbation that follows the abandonment of the use of opium. One of the most tormenting symptoms is, in some cases, want of sleep. A late medical writer says of the effect of the warm bath in such cases, I use his words, "In some cases the elysium, coming after the rack, has been the only period for a month, in which the sufferer had anything resembling a doze."

In conclusion, let me say, that it is through reflex action, that we look for the depressing effects of nauseate, and through it we account for that depression that follows the extraction of blood, where but a small quantity is lost, as in venesection or arteriotomy, or where a wounded vessel has been quickly stopped.

In applying the views advanced in this paper, I will say again that in each particular case, we must make ourselves perfectly familiar with the entire nerve connections of the parts diseased, determine accurately the point of departure of the irritative action, determine also, the cause of irritation, where applied,

when applied, and whether it be cold to the surface or feet, ingesta, breathing of noxious vapors, miasm, traumatic injury, worms in the intestines, dentition, local inflammations, &c., each or either of which cause is capable, through reflex nerve action, of producing phenomena that would appear anomalous if not referred to its agency.

With the hope that I have occupied your time agreeably, I will close, by saying, that I have endeavored to get a little without the beaten track, where old and familiar subjects are met and exhibited by older minds than mine, and even if my paper is crudely formed and desultory in style, I yet trust there is something in it that may be the means of directing our attention to this part of professional study.

ART. II.—No. 2. *Report of the Section on "New Remedies and Pharmacy," to the Cincinnati Academy of Medicine.*

By J. S. UNZICKER, Chairman.

PYRETHRUM ROSEUM, or Persian Insect Powder.—A tincture prepared by macerating one part of Pyrethrum Roseum with four parts of dilute alcohol, is used in the Phillipine Islands against scabies, a disease existing there. It is immediately removed by the tincture, and the itching ceases at once. The tincture diluted with ten times its bulk of water, applied to any part of the body, gives perfect security against all vermin.—*Jägers Travels, Berlin*, 1866.

Transfusion in Cases of Poisoning.—Drs. Eulenburg and Landers, have lately transmitted a treatise to the French Academy on this subject. Supposing that the blood contains an excess of poison, it is seen that by removing a portion of this, so to say, saturated solution, and by substituting a proportional quantum of pure blood, the relative quantity of poison would be greatly reduced. In their experiments the authors continued this solution as long as the symptoms still indicated the presence of poison. The most successful results were obtained with certain poisonous gases, as carbolic acid and carbonic oxyd, and such cases as can not well be reached by antidotes.—*Drug. Circular*, 1866, p. 61.

Pieric Acid in Intermittent Fever.—Persons effected with such types of fever, upon whom quinine has lost its effect, have derived benefit from the use of pieric acid and the picrates. It is not dangerous like arsenic, nor does it derange the stomach like quinine.—*British Medical Journal*.

Bisulphide of Carbon.—Dr. P. H. V. Weyde reports that the inhalation of this substance produces serious derangement of the nervous system, dullness, loss of memory and injury to the intellect; afterward more or less complete paralysis, and finally absolute genital impotence, the testicles become smaller, and the post-mortem of females shows an almost entire obliteration of the ovaries.

Bromide of Potassa.—Drs. Eulenburg and Gutmann, stated before the academy of Paris, that from thirty to sixty grains of bromide of potassa, either by the stomach or injected under the skin, kills a rabbit in from ten to forty minutes. Smaller doses momentarily disturb the action of the heart and paralyze the power of moving and feeling, causing a few shivers. On the post-mortem examination of the animals, no change but some congestions of internal organs is found. With frogs, subcutaneous injection of from one to two grains causes, after ten or fifteen minutes, loss of movement, reflex action and feeling, with arrest of respiration, weakening and infrequency of cardiac ventricular action, retardation of peripheral circulation, and lastly, complete diastolic arrest of the heart's action.—*London Lancet*.

Sulphites in Zymotic Diseases.—Dr. Pollin, of Milan, recommends the internal administration, in a curative point of view, the sulphite of magnesia, both as containing more sulphurous acid, and as also being pleasanter to take. As a prophylactic, he recommends the hyposulphite of soda where it does not act too much as a purgative; and for external use he recommends the sulphite and bisulphite of soda, which are more soluble than the magnesian salts. The sulphite of magnesia will always be tolerated by the stomach, even in extreme cases of irritation, and never acts as a poison. He further says they do not act as poisons toward the several morbid ferments which we have supposed to be the cause of the several zymotic diseases. They do not kill the catalytic germs of organic poisons; but they react on the material components of our own organism, rendering it, by their presence, incapable of being acted on by these catalytic germs.

Carbolic Acid in Burns.—Prof. Pirrie relates a case of extensive

scald in a delicate child, eleven years of age, in which he applied a liniment of one part of carbolic acid in six parts of olive oil. Lint was wet with this and closely applied over the whole of the scalded surface; over this a double layer of tinfoil was placed, and secured by bandage. In ten minutes the pain ceased; in two days the bullæ seemed withering, and on the twelfth day the skin was perfectly healed without any pus being formed.

Oil of Amber.—Rectified oil of amber, as an external application, has been highly spoken of in cases of piles. It is said that after a few applications the sensitiveness disappears, and the tumors are dissipated. This remedy seems worthy of the attention of physicians.—*American Journal Medicine.*

Chlorate of Potassa.—From twenty to thirty grains thrice daily has been given with success to prevent abortion.

Glyconine, a new Glycerole.—To obtain this compound, M. Edmund Sichel employs four parts (by weight,) of yolk of egg, and five parts of glycerine, which he mixes simply in a mortar. It has the consistence of liquid honey, and is unctuous like the fatty substances, over which it has the advantage of being easily removed by water. It is unalterable, a specimen having been left exposed to the air for three years with impunity. Applied to the skin it forms on the surface a varnish, which protects it from contact of the air. These properties render it serviceable for broken surfaces of all kinds, particularly for burns, erysipelas and cutaneous affections, in which it soothes the itching, also for sore nipples, etc.

Antidote for Strychnia.—Dr. J. Bartlett recommends common salt. He reports twenty experiments on dogs, in which violent symptoms following large doses of strychnia ceased after emetics, induced after drenching the animal with a solution of salt. (Query by the Chairman—Is not salt in large doses poisonous to dogs' also?)

Pharmacy.

Aqua Destillatas.—We respectfully request your attention on this subject at the present time, owing to the indispensable necessity of distilled water for solutions of nitrate of silver and many other pharmaceutical preparations. In fact no solution intended for the eye, or sub-cutaneous injections, ought to be made without it, but we are sorry to say is hardly ever done. You frequently prescribe distilled water, innocently believing that

you get the same. This is, however, far from being the fact in most instances. There is not one in twelve of the druggists in this city who keep the actual distilled water of our pharmacopœia. Most of them keep none at all, and a few for *convenience and cost-nothing sake*—go to where an engine is used and get what they call condensed water from the boilers, which is far from being distilled water, but dispense it as such, nevertheless. Some of this condensed water we have seen, although kept in stoppered bottles, changed after several weeks and assumed a gelatinous consistane, becoming entirely unfit for any use.

It is but due, however, to say, that there are some honorable exceptions. The *true pharmaceutists* who always keep the best articles on hand, and consider it no trouble to live up to the pharmacopœia, are the gentlemen only who deserve the patronage of the Academy of Medicine. But we are sorry to say this is not always the case, while some of the best pharmaceutists are often overlooked and allowed to starve, men who know more about selling fusil whisky for bourbon than pharmacy, are largely patronized. This is encouraging quackery, and reflects on the intelligence of the medical men doing so, who ought to remember the "*Similis, simili, gaudet.*"

ART. III.—*A Case of Wound of the Heart.—Death.*

By A. M. JOHNSON, M. D., Cincinnati.

I WAS called on Thursday afternoon, March 26, about three o'clock, to see a man who had shot himself, with the intention of committing suicide.

On entering the room I found him lying in bed on his back, in the same position as when he committed the deed. His appearance was that of a person in articulo mortis, face pallid, surface covered with a cold clammy sweat, eyes drawn up under upper lids, no pulse at the wrist, respiration slow and difficult. He is wholly unconscious and can not be aroused.

Making an examination I found a small wound between the fifth and sixth ribs, about one inch below and a little backward of the left nipple. There is no external hemorrhage. Considering the situation of the wound and the symptoms which presented themselves, I thought the patient could live but a very little while, and deemed it unnecessary to do anything for him.

A few minutes later Drs. E. H. Johnson and C. P. Judkins came into the room, who, after examining the case, agreed with me that nothing could be done for the man, and that he must soon die. They then left, promising to return in half an hour. Sitting by the bed-side, I observed some convulsive movements of the patient, which led me to believe that there was more vitality than I had at first supposed.

Moistening a handkerchief with spirits of camphor, which was fortunately in the room, I applied it to his mouth and nostrils. After several inspirations he seemed to respond slightly to the stimulus. Continuing the inhalation of the spirits of camphor, I made brisk friction to the extremities, placed bottles of hot water between his legs, and covered him up with hot blankets. Reviving a little more I placed a bit of muslin saturated with whisky in his mouth, with the hope that a few drops of the liquid might find their way to his stomach, for he is unable to swallow. The pulse is not yet perceptible at the wrist. The heart's action not tumultuous—slow, regular, but feeble. Continuing the treatment, I was gratified, after a while, to see that he was able to swallow a little and ordered :

R.—Carb. Ammoniæ, $\frac{3}{4}$ ij,
Mucilag Acacia, $\frac{3}{4}$ iv. M.

By the time the medicine was brought to the house, he had so far rallied as to take a teaspoonful in some whisky and water, which was repeated every fifteen minutes for an hour and a half, when reaction began to manifest itself decidedly, the pulse being perceptible at the wrist, the skin warmer, the eyes resuming their natural position, and he can be aroused when questions are asked him.

My colleagues now returned and were much surprised at the changed state of his condition. It was agreed to continue the treatment, and leaving them to watch the case, I promised to meet them at eight o'clock P. M.

8 o'clock P. M. Met Dr. E. H. J. Reaction fully established; pulse full, regular, one hundred and twenty per minute; no unnatural action of the heart; temperature of surface natural; skin dry; complains of pain in the chest; some cough; no haemoptysis; very restless, throwing himself about on the bed; there is now considerable hemorrhage from the external wound.

Omit Carb. Ammon. and whisky. Apply cold water compressed to chest. Ordered the following prescription :

R.—Sulph. Morphiæ., grs. ij,
Pulv. Ipecachuana, grs. iv,

M.—Div. in Chart No. 4. Sig. one every two hours.

10 $\frac{1}{2}$ P. M. Has taken two of the powders; condition much the same as at last visit, except that he is not so restless and is disposed to sleep. Continue powders unless sleeping.

27th, 6 A. M. Dr. Judkins saw him; has taken but one powder (at 4 A. M.) since last visit; pulse one hundred and thirty, not so full, weaker. Dr. J. directed to give but half a powder every two hours; to resume the carb. amm. and whisky at like intervals, and to take beef tea as he may desire; external hemorrhage has ceased.

9 A. M. Patient seemed comfortable; pulse one hundred and ten per minute; considerable thirst; cough continues; expectoration not bloody. Continue treatment.

11 A. M. Met Drs. Johnson and Judkins. Patient is much the same as at nine o'clock. Dr. Judkins introduced the catheter and drew off about six ounces of urine. Directed an injection of soap suds Oij and ol rieni 3ij, to be given immediately; also

R—Sulph. Morph., grs. iss,
Pulv. Ipecac, grs. ij. M.

Div. in Chart No. 6. Sig. one every four hours. To take a tea-spoonful of the carb. ammon mixture every four hours in the intervals. Continue the beef tea.

2 P. M. Is not so well; temperature of surface reduced; pulse smaller, more frequent and feeble; still coughs, but sputæ not tinged with blood. Continue medicines and to have whisky and water at frequent intervals. Urine again drawn off.

10 P. M. Is evidently sinking; pulse one hundred and twenty per minute; small, weak; respiration laborious; extremities cold. Omit the powders of Morph. and Ipecac and give carb. amm. mixture every two hours; also whisky as before.

28th, 3 A. M. Died thirty-six hours after inflicting the wound.

Autopsy, thirteen hours after death. Rigidity of muscles not marked. On removing the sternum the effects of inflammatory action were seen in the adhesions of the pleuræ at many points and the deposition of lymph upon the outer surface of the pericardium. The left cavity of the thorax contained about twenty

ounces of serum, and twelve to fourteen ounces of coagulated blood. Internal surface of pericardium greatly inflamed, and external surface of heart covered with a layer of coagulated lymph of such density as to hide the wounds in the left ventricle, and which were discovered on tearing away this membrane. About three ounces of serum and one ounce of coagulated blood were taken from the pericardial sac.

The ball penetrated the thorax between the fifth and sixth ribs, passed through the anterior lower portion of the upper lobe of the left lung, making a ragged wound two inches in length, through the pericardium, through the anterior walls of the left ventricle; one inch from the apex of the heart, upward and backward, and emerged through the posterior wall of same ventricle, immediately below the attached margin of the mitral valve, without so far as was observed, dividing any of the columnæ carnae, and making a contused wound on the posterior portion of the pericardium, and of the œsophagus, as they lay on the spinal column, fell back into the cavity of the sac.

Puerperal Convulsions.

EDITORS LANCET AND OBSERVER:—I have been a constant reader of your valuable periodical for more than four years, and as yet have never had the pleasure of perusing an article giving what I deem the therapeutics of "Eclampsia Gravidarum et Parturientium." I have, however, in the Medical Record, found an essay that meets my hearty approbation, as it must all who are under the painful necessity of administering to the unfortunate subjects of the above malady. Now the practitioner is seldom called upon to visit a patient and prescribe for a disease, presenting a more formidable character, nor a disease accompanied usually with a greater rate of mortality. In view then of the frequency of convulsions and the necessity of an appropriate treatment, should the subject not demand more thorough discussion through the medium of medical journals. Many physicians have never met with a case of spasms, and hence the neglect of a thorough understanding of its etiology, pathology and therapeutics. There are those also who have treated a number of cases

and have deeply regretted the results, but still they cry out innovation when new remedies are offered. They will listen to no other course of treatment than calomel antimony and venesection.

Prof. Thomas enumerates the following causes for epileptiform convulsions:

"1. Reflex or eccentric irritation, as from dentition, crude ingesta, etc.

"2 Centric irritation, as in cerebral diseases, meningitis, pressure on the brain, etc.

"3. Specific poisons, as lead, strychnia, the various narcotics, etc.

"4. Disorder of the cerebral circulation, as from congestion, anaemia, etc."

Either of the above derangements during, prior or subsequent, to parturition, may induce convulsions. From the two former causes I would infer that the seizures were more liable to occur before delivery, and that a removal of the foetus, or of the exciting cause, would put an end to the spasms. When occurring subsequent to delivery, I should attribute it to the two latter causes, and such patients should undergo a preparatory treatment, *i. e.*, medicines should be given with a view to neutralize the noxious constituents of the vital current, and to more equitably distribute the blood, thereby preventing congestion, etc.

I shall give a brief clinical report of three cases occurring in my practice within the last eighteen months.

Mrs. C——, mother of five children was confined on the 20th day of August, 1866. Digital examination showed the breech to be presenting; liquor amnii soon came away, and in due time she was delivered of a healthy foetus and without much suffering. After dividing the cord I placed my hand upon the abdomen to kneed the uterus, when I discovered still another child contained within. I again found the breech presenting as with the first, pains came on regularly and the second child was expelled. The children were large and seemingly as healthy as any I had ever delivered, and I have never attended a case of labor that progressed more favorably from its inception to completion than this. I remained one hour with her, and left her doing, as I supposed, excellent. I had been at home but one hour when I was called again. I now found my patient complaining of great pain in the region of the epigastrium, which continued notwithstanding everything calculated to remove it was administered. She con-

tinued to grow worse for a period of six hours, when she was attacked with a violent convulsion. Consultation having arrived before the spasm commenced, venesection, opium, calomel, tartar emetic and counter-irritation, with cold applications to the head was the line of treatment pursued. Spasms now recurred at intervals of thirty minutes. There was total loss of consciousness. A purgative dose of calomel and jalap was given and operated finely, causing a large discharge of undigested food, but without producing any effect on the seizures whatever. I urged the use of chloroform strongly, but council would not consent. After twenty-four violent convulsions she became entirely exhausted, and death closed the scene. The extraordioary size of the uterus (containing twins,) would indicate hurtful pressure upon the kidneys; thus impairing their eliminative functions. Anasarea had been excessive. This case undoubtedly arose from the toxic results of non-elimination of the excretions of the blood, and should have been under a preparatory treatment for at least one month before confinement.

Mrs. N—, aged twenty-two; primipara. Near the approach of parturition was seized with pain of the stomach; vomiting ensued, followed soon by a convulsion. On my arrival I made digital examination and found the os had not begun to dilate; gave physic; one hour elapsed and immediately another spasm followed. I now allowed her to inhale chloroform which controlled largely the fits, and if its use was constantly kept up, the seizures were stayed off. My supply of chloroform running out, I dispatched her husband to the nearest town (six miles,) to procure more, and also to bring council. Instead of bringing chloroform as directed, council brought sulph. ether which proved too much of an excitant. She now had spasms regularly every half hour until chloroform could be obtained which, as before, controlled the fits. Labor pains finally became apparent between the seizures, and I now found dilatation taking place rapidly; consciousness now returned, and the patient begged for more chloroform which was denied her by council on the ground that its relaxing effects (?) would induce flooding. She was finally delivered of a living fœtus being all the time, during labor, in a semi-convulsive state. The anæsthetic I thought, and still think, was imperatively demanded during labor.

The cord was divided after respiration was established, and but a few moments elapsed until another violent convulsion came

on, which in less than fifteen minutes was succeeded by still another, if possible more aggravated. I now believed the only hope was anæsthesia, and I accordingly put her profoundly under its influence and kept her in that condition seven hours; at the end of that time she awoke and was perfectly sane; she made a rapid recovery. Her child had nine convulsions after its birth. Both are now well.

The symptoms accompanying this case I believe will fully warrant me in saying, that the spasms originated from eccentric irritation, caused by the presence of the fœtus in utero, and crude ingesta in the stomach. Such being the case the treatment evidently indicated was chloroform to quiet the nervous centers, and an active cathartic to bring away the engorged contents of the epigastrium and bowels.

Mrs. C——, primipara. Had been in labor twenty-four hours when her pains became non-expulsive, and convulsions ensued. She had been in labor forty-eight hours when I first visited her. I was informed by Drs. Kemper and Creel, that she had had fourteen convulsions. The cord was prolapsed and pulseless; she presented a blanched and ex-sanguinal appearance. Pains now recurred at regular intervals, but were powerless to effect delivery; convulsions came on every forty minutes; blood had been abstracted largely and chloroform had been sparingly used. Upon examination I found the head in the first position; pelvis roomy, and cord prolapsed. I insisted upon more free use of the anæsthetic, which almost completely controlled the spasms. The use of the forceps was decided upon, and I introduced the male blade, and the introduction of the female blade brought on another spasm. After having the blades securely locked on the approach of the pains, I made gentle traction from right to left, increasing gradually the amount of traction at every pain, until I succeeded in delivering the child. After my arrival, and until the delivery was consummated, she was kept profoundly under the influence of chloroform.

I am unable to determine the cause of the labor becoming powerless in the above case. The treatment indicated was to place the patient under the influence of chloroform and remove the fœtus with forceps. The mother made a rapid recovery.

I will bring this article to a close by quoting from Prof. T. G. Thomas' lecture on Puerperal Convulsions, delivered at the college of Physicians and Surgeons, New York, January, 1868. He says

in concluding his lecture: "Let me, with the hope of leaving a complete picture on your minds, place before you a synopsis of the treatment of puerperal convulsions:

"1st. Bring the patient fully under the influence of chloroform.

"2d. *If the indications demand it,* practice venesection.

"3d. If labor has commenced, hasten it. If not, endeavor to avoid the necessity of inducing it; but if you can not, do not hesitate too long about its accomplishment.

"4th. Act freely on the bowels and skin, apply cold to the head, and give lemonade freely, if the patient can swallow.

"5th. Bear in mind that the prolonged use of chloroform is not near so likely to kill as a return of the convulsions is."

Yours, Respectfully,

F. W. HUNTER.

ART. V.—*Report of a Case of Croup.*

BY C. B. HALL, M. D.

EDITORS LANCET AND OBSERVER.—I report for your journal the following case of croup, because it is the first in which I ever tried the application of cloths wrung out of cold water in that disease.

I was called on Monday evening, March 2d, 1868, to see the child, Charley W., aged 14 months. He was attacked in the afternoon of the previous day, Sunday, with hard breathing and harsh, barking cough. This continued severe all night, but in the morning, the child seemed better, and played about the room. It was ten o'clock Monday night, about thirty-two hours after the attack that I first saw the child. Skin hot; pulse 160; countenance very anxious; breathing very difficult, the air fairly whistling through the trachea; frequent, hard, barking cough. I do not think the child could have lived till morning without relief. I gave two teaspoonsfuls comp. squill syrup immediately; waited ten minutes and gave one more teaspoonful; waited ten minutes and gave $\frac{1}{2}$ gr. tartar emetic and iij grs. calomel, floating on a teaspoonful of the syrup. In about five minutes, full, free and continuous vomiting ensued. The child breathed better. Calomel x grs., Pulv. antimon v grs., made in five powders; one every two hours. Comp. squill syrup 10 drops every half hour or hour, according to effect. Cloths wrung out

of cold water to be constantly applied over the inflamed trachea, and changed every few minutes. The next morning, the father called to say the child was much better. I ordered the syrup and the cold cloths to be continued. In the evening I was requested to see the child, as it was not so well. I found skin moist and cool; pulse 120; breathing greatly improved though still croupal, and a little labored from narrowing of the tracheal passage. The cough had lost its ring, and the whistling noise of respiration was changed to a moist rale. In short, there was every appearance of the inflammation terminating in resolution, with only moderate effusion. Continue cold applications and syrup, and give one of the following powders every three hours till four doses are taken. Grey powder, iij grs., pulv. antimon j grain to each powder. The powder to be followed in the morning with teaspoonful castor oil, ten drops spts. turpentine. The child made a good recovery.

I have no theory to maintain, no hobby to ride. I have treated many cases of croup, some successfully, some unsuccessfully. I confess I could not be induced to throw away such potent agents as tartar emetic and calomel, (which have carried me through hundreds of sharp conflicts with inflammatory diseases, and whose virtues I know,) in the treatment of such a rapidly fatal disease as cynanche trachealis. And yet I am inclined to believe that in the application of cold to the throat, we have an excellent adjuvant, and as cases present, I shall give it further trial.

MILLER's Ohio, March 12th.

Hospital Reports.

Cincinnati Hospital.

Service of DR. J. F. WHITE.—Reported by DR. J. L. CLEVELAND, Resident Physician
Hysteria.—Cases Illustrative.

Rose D—, native of Ireland; aged 18; admitted Feb. 15th, 1868. Was sick three weeks previous to admission. Symptoms, according to her report, being the same as when admitted.

Condition when admitted.—Pain in back, head and bowels; bowels constipated; urine scanty. At this time was apparently

healthy, and would get up, from day to day, and walk about the room in a languid manner. Bowels were never moved, except by an active cathartic, and her urine was passed once in two or three days. This torpidity of bowels and kidneys, both seemed, as far as could be elicited by catechising, to be dependent to a great extent, if not entirely, upon habit. On the 28th, 13 days after admission, it was supposed that she was getting better, but the next day she relapsed into her old condition. She has grown weaker from day to day, and much emaciated. Up to the 20th of March, a catheter was used in drawing off her urine. Since then she has passed it freely without aid. Same symptoms remain up to present time. Headache which is not continuous, fleeting pains in back and abdomen, occasional nausea and sometimes vomiting, loss of appetite, depression of spirits amounting to stupidity; muscles relaxed and will to act gone; hardly sufficient energy to talk. The above mentioned symptoms have been treated by the most approved remedies. Most of the time, she has been treated upon the hypothesis that the primary trouble is hysteria.

Mary C—, native of Ohio; aged 20; admitted Feb. 17, for acute rheumatism.

Condition when admitted.—Frame strong and muscular; tongue coated; appetite nil; bowels constipated; left knee slightly swelled but not inflamed; some tenderness to touch. She was attacked daily with spasms of the voluntary muscles, at which time she would cry piteously for help. It was soon discovered that these were under the control of her will, for she was laughed at, until she was ashamed to have them. Pain in knee still continues up to the present, without any signs of inflammation, or morbid action sufficient to account for the acute pain with which she suffers, so intense at times, that she has to have opiates. All of the rheumatic remedies which have been tried, both local and systemic, have failed to give relief. She remains at present, 41 days after admission, in the same condition locally, while her general condition is worse than when admitted.

Eliza D—Ireland; aged 39; admitted for intermittent fever.

Condition and symptoms when admitted.—A woman of good physique; slightly anaemic; says she has had chills daily for a week past; complains of great tenderness over thorax, anterior and posterior, and over entire abdomen; also has a sense of smother-

ing. These symptoms are of a fleeting character, for most of the time she is up at work about the ward. Had no chill after coming into the house. Every few days she would have an attack of an anomalous character, in which the above mentioned symptoms are exaggerated. In these attacks she complains of great tenderness over epigastrium and sickness of stomach. After a few days observation, it was found that the attacks continued and were violent in proportion to the attention she received, and thus she remains at present.

It will be observed that in the report of these cases, the disease called hysteria, has been given a great deal of latitude. In case No. 1, no lesion can be discovered to account for her condition, except her obstinate constipation; but cathartics seem rather to aggravate than improve her condition, and as soon as they are left off, she relapses again into what has become to her a habit. The disturbing cause which induces the group of symptoms above enumerated, seems to be the almost total deficiency of will and energy, muscles of voluntary life consequently are sluggish, and this doubtless has its effect upon organic life, for she is gradually wasting away. Thus we see that what was originally a morbid state of mind has acted upon the body till a condition of disease has been produced. Case No. 2 is peculiar in that the persistent pain in left knee seems to be dependent upon a morbid condition of mind.

Whilst case No. 3 is ordinary, being prompted by a morbid desire to excite sympathy.

Service of PROF. MENDENHALL.

Mary Crick, aged 21; German; unmarried; seamstress; primipara.—Was admitted to Hospital, March 13th, and delivered March 21st, at one o'clock A. M., of a healthy child, weighing $6\frac{3}{4}$ lbs. Health during gestation very good, and patient was exceedingly robust in appearance. Labor, though somewhat tedious, (1st stage 20 hours,) progressed favorably until third stage was reached, when considerable difficulty was experienced in the removal of the placenta, it remaining attached to uterus, apparently by the membranes. After a delay of $3\frac{1}{2}$ hours, the placenta was extracted, followed by the removal of a handful of membranes. Hemorrhage rather more than normal, from uterus refusing promptly to contract, and it had a tendency to remain far over in right iliac fossa. With a little manipulation, all progressed

apparently favorably, though the uterus did not very firmly contract.

March 22. Had severe after-pains yesterday afternoon, which were controlled by the following :

R.—Pulv. Opii. gr. iv.

Pulv. Camphoris gr. xij.

W. chart vi. Sig. One every three hours.

This morning pulse is 116, tongue clean, lochia normal and slight pain on pressure in hypogastria.

Evening.—Pulse 136, uterus congested and tender to touch. To have turpentine stupe applied to hypogastric region. Also,

R.—Hydrarg. Chloriti Mitis gr. vi.

Pulvis Ip. Comp. 5ss.

M.—Et Ft. chart vi. S. One every three hours.

23. Pulse 148 and weak; abdomen tympanitic and very tender; lochia very scanty; great nausea and patient vomited twice this morning; tongue still clean. Emplastrum Canth. 10x10 in. to be applied to lower part of abdomen, and to have

Olei Ricini 5i.

OI. Terebinth. 5i.

Also,

R.—Ammoniæ Carb. Fij.

Aqua Camphoræ 5iv.

Ft. Sol. S. 5ss every two hours.

Bowels not being moved by oil and turpentine, patient, four hours later, received the following enema, which produced desired effect.

R.—Olei Ricini 5i.

Olei Terebinth 5ss.

Laetis Assafetidæ 5ss

Aqua Oi.

5 o'clock P. M. Pulse 156 and very weak; tympanitis and tenderness increasing, and extending upward, the greatest tenderness being in epigastric and part of hypochondriac regions.

To have whisky 5ss every two hours, alternating with camphor water and carb. ammonia, also given every two hours. Also to receive opii gr. $\frac{2}{3}$ and Camphoris gr. ij in chart. every three hours. Later in the evening and through the night, patient received opiates every two hours, Morphicæ Sulph. gr. $\frac{1}{4}$ being given alternately with C. and O. powders.

24th. Patient continued to fail during the night, and died at 9 o'clock this morning, intense nausea continuing to the last. A slightly pinched expression of countenance was observed throughout the disease. No chill occurred at any time.

An autopsy was held by Prof. Taylor, 26 hours after death, when the following condition was revealed.

Abdomen very much distended with gas; greenish discoloration of chest and loins; decomposition far advanced. On opening abdominal cavity, a large quantity of foetid gas escaped, also a large quantity of dark serum, containing shreds of lymph.

The omentum was injected, the intestines covered with coagulable lymph and adherent to each other, the parietal peritoneum injected in patches. Stomach greatly distended by gas, its mucus membrane dark colored and softened.

The uterus was as large as at sixth month of gestation and flaccid, its peritoneal surface reddened, and its anterior portion coated with coagulable lymph, in the vesico-uterine fold was a considerable quantity of thick puriform fluid. The internal surface of the uterus was unusually clean for this period after delivery. The mucus membrane was soft, and in some portions detached. The substance of the organ softer than usual but pale, the sinuses patulus otherwise normal.

Spleen twice the normal size, its substance very soft.

Liver softened, pale immediately beneath its peritoneal covering, dipping into its substance were numerous cavities, about the size of a pea, presenting the appearance of small abscesses, though containing no fluid.

Surface of kidney mottled red and white; substance very soft. Tubular portion dark red.

Heart soft, contained soft, pale coagula, its inner surface and that of the large blood vessels being blood stained.

Happily such cases as the foregoing are comparatively rare, but therefore of more interest when observed throughout their course, and opportunity for post-mortem examination afforded.

Material modification of the views of pathologists regarding puerperal fevers has taken place in recent years.

The proposition of Kiwisch and Buhl that in all puerperal diseases the inner surface of the uterus is first affected, and that all subsequent affections originate in, and are dependant on such

affection, at first sight so sweeping, will upon closer examination present many facts to establish its general, if not its universal accuracy.

The anatomical relations of the uterus, and its condition after delivery, with a disintegrating mucus membrane, numerous more or less patulous blood-vessels, lesions of its walls, an abundant supply of blood, and often conjoined with these an exhausted constitutional condition, offering so many avenues and such favorable opportunities for the transfer of morbid elements, it is remarkable that these diseases are not more frequent.

That they are so seldom met with tends to establish the view that some determining cause is requisite for their development, a doctrine countenanced by eminent authorities.

Dr. Playfair at a recent meeting of the Obstetrical Society of London, commenting on some cases of puerperal fever says: "There can be no doubt that the cause of the disease was the same as that which was producing erysipelas in the surgical wards." The President, Dr. H. Davis, said he was a "strict believer in the contagion of puerperal fever from patient to patient," i. e. in an origin extrinsic to, and independent of the conditions of the patient; and Klob, of Vienna, says: "I agree perfectly with Virchow that in such cases we have a specific inflammation, resembling the phlegmonous erysipelas of the skin and subcutaneous tissue."

The case under consideration sustains the foregoing opinions, being one of a number which occurred within a brief period, and also in that erysipelas was, or had been present in the surgical wards.

Having these requisites for the development of puerperal processes, the course varies without obvious reason, frequently the thrombi, normally formed in the sinuses after delivery, breaks down, and being transported as emboli, convey the debris of the diseased uterine cavity to remote parts; or the corresponding process occurring in the lymphatics analogous results follow.

Most frequently where peritonitis occurs, it is from propagation of the inflammatory process of the mucus membrane via the fallopian tubes, in other cases the communication is through metritis proper.

The connection of septicæmia with these different processes is manifest. That it existed in our case is shown by the condition of the various organs of the body.

Regarding treatment, accepting the views advanced as to the origin of puerperal processes, it is obvious that one great preventative of such diseases consists in securing and maintaining firm contraction of the uterus after delivery. Another great therapeutic procedure of great value is injection of the uterus with detergent and antiseptic fluids.

At the meeting of the Obstetrical Society referred to, permanganate of potassa, tinct. iodine, sulphites alone, or with carbolic acid, were commended for this purpose.

We have used the carbolic acid in glycerin with good effects, and would urge the importance of similar medication whenever the lochia become at all offensive.

Medical Societies.

The American Medical Association.

THE association held the first session of its annual meeting in Carroll Hall, on G street, at 11 o'clock Tuesday, May 6, about four hundred and fifty delegates being present, many of whom reported at the hall on Monday evening and registered their names. These represent nearly all the States of the Union, many of the Southern States being represented. Many of the most prominent and successful medical men of the country were present on the stage and floor of the hall, and quite a large number of ladies and gentlemen occupied the galleries as spectators.

The convention was called to order at 11 A. M. by Dr. S. D. Gross, of Philadelphia, President, and Rev. Dr. Pickney, of Washington, petitioned the throne of grace.

Dr. W. B. Atkinson, of Philadelphia, permanent Secretary, called the roll of delegates, and those who were present responded. Dr. Grafton Tyler, of Georgetown, arose and made the welcoming address, in the course of which he said: "The physicians of this city had anticipated the arrival of the delegates, and provided for their welfare, and now greeted one and all with the earnest welcome of their hearts. As he saw before him delegates from the East, West, North and the South [applause] it caused him joy and happiness. This city founded by Washington, bearing his immortal

name is the home of all our countrymen. The purposes of our profession are not less important than any which operate near the central power of a great nation. What more proper place than this for the depository of the archives and transaction of the business of the association.

Just ten years ago, you honored our city with your presence. The workings and facilities of our profession have been much improved here in that time by a laborious application and a wide and important experience. Since then, there have been established here two medical colleges and several other important institutions, in aid of the improvement of science. The association we are connected with is inferior to none in the world. It has had a wide and important experience, not only in private practice in private life, but on the bloody battle-field and in the tented hospital. The consciousness that you are acting, not to kill, but to save; not to torture, but to alleviate, will vindicate you in your noble and profitable services; to friends and foes were administered consolation and solace alike; there were made no distinctions there.

Here you are assembled to-day, to consider the most important interests confided to man—the health, the social comfort of individuals, communities, nations, and even the entire world; for all the world has felt the benefits of American medical science—that science which contributes most to give all mankind freedom from pain. This calls for a grateful homage from the genius of America. In all the efforts of man nothing contributes more to success than the principle of combination, and this has been the great secret of the success of the science of this profession.

Before him, he saw representatives from nearly all the States. Would that every State could be represented here. He also saw numerous representatives from the army and navy whose achievements of science cannot be eclipsed in any other branch of the profession. For twenty-one years the profession have met together with great personal sacrifice generally, but this, he felt would amply repay all who should avail themselves of its benefits. Well might the founders of this association feel proud of its record and its progress in the sciences, whether those founders be present in the hall or far away in their homes. Under the guidance of well-disciplined minds the institution had been singularly preserved in its integrity. It sets forth examples worthy of imitation. It was composed of old and

young, embracing the great, wise and illustrious. There was no representing here different States with clashing opinions; but all come together as a common brotherhood in science, meeting as a great concert for the benefit of the human race, with wisdom and humanity. We again bid you an earnest and hearty welcome, with the best feelings of our hearts, among us, in this city, and hope you may experience a pleasant and profitable sojourn here. [Applause.]

On motion, the following programme, submitted by the Committee of Arrangements, was read and adopted.

The sessions of the association will commence each day at 11 A. M., and continue two or three hours. At the opening session the various "sections" will be selected, and all papers introduced will be referred to their appropriate section. These sections will meet each day at 3. P. M., when all papers referred to them will be discussed.

The following is the manner in which the delegates will enjoy themselves in the evening.

Between 8 and 9 o'clock the association will pay their respects to President Johnson. At 9 o'clock Chief Justice Chase and Speaker Colfax will hold receptions in honor of the distinguished visitors.

On Wednesday evening, from 6 to 10 o'clock, there will be an exhibition of microscopic views at the Army Medical Museum, on Tenth Street.

At 9 o'clock, Wednesday evening, Senator Morgan, of New York, will entertain the visitors at his mansion.

On Thursday evening, from 8 to 9 o'clock, it has been arranged to have the Capitol building lighted, and the dome brilliantly illuminated.

At 9 o'clock the delegates will be entertained by Mayor Wallach at his residence.

The sessions of the Convention will conclude on Friday at 12 o'clock M.

On motion of Dr. Arnold, Dr. Percival, of Aiken, S. C., was admitted a member, by invitation.

The President, Dr. S. D. Gross, here arose and delivered his annual address, which for eloquence, force and sound logical science, is rarely if ever surpassed. The speaker consumed about fifty-five minutes in its delivery, and was frequently applauded.

Reports of Committees were then called for, when Dr. Jas. S. Hildreth, of Illinois, submitted a report on ophthalmology, which was referred to the section on Surgery.

The report of Committees on cultivation of the cinchona tree, by Dr. J. M. Toner, D. C.; on surgical diseases of Women, by Dr. Theophilus Parvin, Indiana; on American Medical necrology, by C. C. Cox, Md., were postponed till to-morrow.

The report on insanity, by Dr. C. A. Lee, N. Y., was referred to the section on psychology.

Dr. C. A. Lee, N. Y., from the committee on provision for the insane, desired to read to the Association the report which had been presented, as considerable time had been spent in making it up, but did not do so.

Dr. E. K. Hunt, from the committee on climatology and epidemics, of Connecticut, obtained permission to report at any time within three years, but signified his intention to do so at the annual meeting.

Dr. D. F. Condie, from the same committee, in Pennsylvania submitted a report, which was referred to the committee on epidemics.

The report of Dr. T. J. Hein, of Texas, from the same Committee, was referred to the Committee on Epidemics.

The report of Dr. R. C. Hamill, of Illinois, on the same subject, was referred.

Dr. J. F. Hibberd, of Indiana, from the same committee, for his State, not being ready to report, was granted further time.

Dr. T. Antisell, of the District of Columbia, submitted a report on climatology and epidemics of the District which was referred.

Dr. J. G. Richardson, of New York, from the committee on clinical thermometry in diphtheria, not being present, was granted another year to prepare his report.

Dr. Benjamin Howard, of New York, was released from further serving on the committee on the ligation of arteries.

The report of Dr. L. A. Sayre, of New York, from the committee on the treatment of club foot without tenotomy, was referred to the section on surgery.

The committee on operations for hair lip, (Dr. Hammer, chairman,) was continued one year.

Dr. Charles Woodward, of Ohio, from the committee on prize essays, submitted a report, which was approved.

The secretary offered a communication, which was referred to the committee on meteorology and epidemics.

The subject of prize essays was then taken up, and after brief consideration was indefinitely postponed.

The committee on medical ethics and on consultations with female practitioners was read by the secretary, and closed with the following resolution :

Resolved, That the question of sex has never been considered by this association in connection with consultations among medical practitioners, and that, in the opinion of this meeting every member of this body has a perfect right to consult with any one who presents the "only presumptive evidence of professional abilities and acquirements required by this association," viz: a regular medical education.

Resolved, That the resignation of Dr. Julius Homberger, of New York, be accepted, and that all further consideration of him or his peculiar methods of procuring practice be indefinitely postponed.

The resignation of Dr. Homberger was, on motion, accepted when a motion was made to strike his name from the roll of membership. This was laid on the table but afterward referred to the committee on medical ethics.

Dr. N. S. Davis, of Illinois, submitted his report on the rank and regulations of medical men in the United States navy, which was accepted, and referred to the committee on printing.

The committee favor urging Congress to pass a law granting to medical men serving the navy prize money, as is granted to other officers of the navy.

The secretary here reported that he had before him charges preferred against Dr. A. G. Field, of Des Moines, Iowa, by Drs. W. P. Talliaferro and S. B. Buckner, of Cincinnati.

The chair on motion, appointed the following members of the profession a committee on medical ethics for the ensuing year : Drs. Condie, Davis, Post, Askew and Baldwin.

On motion the committee on the rank of the naval staff was continued.

The following were announced as the ordinances governing the sections of the association for the year 1868:

The general meetings of the association shall be restricted to the morning sessions ; and the afternoon sessions, commencing at 3'o'clock, shall be devoted to the hearing of reports and papers and their consideration in the following sections : 1, chemistry and *materia medica* ; 2, practical medicine and obstetrics ; 3, sur-

gery and anatomy; 4, meteorology, medical topography and epidemic diseases; 5, medical jurisprudence, hygiene and physiology; 6, psychology. Each section shall choose its own officers and make its own rules of order.

All essays, voluntary communications and reports, except those of the officers of the association and those of the committees of publication, on medical education, medical literature and prize essays shall first be presented to the association by a brief extract, and referred to the appropriate sections, in which they shall be examined and discussed, after which they shall be returned to the permanent secretary of the association, accompanied by an expression of opinion as to whether they are worthy of publication or not. And the secretary shall pass all such as are thus designated to be worthy, directly to the committee of publication; and such as are not so designated shall be retained by the secretary, or returned to their authors, as the latter may indicate.

Additional Ordinances, passed in May, 1867.

Resolved, That the several sections of this association be requested in the future, to refer no papers or reports to the committee of publication, except such as can be fairly classed under one of the three following heads, viz: 1. Such as may contain and establish *positively* new facts, modes of practice, or principles of real value. 2. Such as may contain the results of well devised original experimental researches. 3. Such as present so complete a review of the facts on any particular subject as to enable the writer to deduce therefrom legitimate conclusions of importance

Resolved, That the several sections be requested, in the future, to refer all such papers as may be presented to them for examination by this association, that contain matter of more or less value, and yet cannot be fairly ranked under either of the heads mentioned in the foregoing resolution, back to their authors, with the recommendation that they be published in such regular medical periodicals as said authors may select, with the privilege of placing at the head of such papers, "read to the — section of the American Medical Association, on the — day of —, 18—"

Resolved, That no report or other paper shall be presented to this association, unless it be so prepared that it can be put at once into the hands of the permanent secretary, to be transmitted to the committee of publication.

About 2 P. M. the association adjourned.

At 8 o'clock, evening, the medical fraternity proceeded in a body to the White House, with Dr. Grafton Tylor, of Georgetown, at their head. They were ushered into the Blue Room, where the President was in waiting, with Mrs. Stover, Mrs. Patterson, and Secretary Seward, who assisted in the reception of the visitors, Dr. Tyler introducing the fraternity.

The President, the ladies, and Mr. Seward appeared to be in their pleasantest mood, and the delegates appeared to enjoy the interview very much.

Quite a large number of ladies accompanied the visitors, who passed from the Blue Room to the East Room, where all mingled freely for the space of fifteen minutes, when they left the mansion, and proceeded to the residence of Speaker Colfax No. 7 Sixteen-and-a-half street west, to pay their addresses to Mr. Colfax. They were received in a very cordial manner by the Speaker and Mrs. Matthews and daughter, Dr. Tyler introducing the delegates.

The delegation then went to the residence of Chief Justice Chase, corner of Sixth and E streets, for the purpose of paying him a complimentary visit, but they found the doors closed. Upon inquiry, it was ascertained that a mistake had occurred in the date of the letter, passed between the Committee of Arrangements and Mr. Chase, which caused him to have preparations made for their reception the following evening.

SECOND DAY—*Wednesday*.—The Association met at 9 o'clock.

The report of the committee on the topics embraced in the President's address was received, and the suggestions of the committee were ordered to be placed in the form of resolutions.

Dr. Cox, Chairman on Alterations in the Constitution of the Association, and to revise the plan of organization, presented a report which advises many changes in the laws and orders governing the admission of members, and in fact many amendments to the constitution.

The report was a long one, and occupied much time in its reading and the designation of the proposed amendments to the constitution. The report was ordered to be printed, placed in the Minutes of the Proceedings, to be acted on at the next meeting of the Association. Prof. Smith, of Baltimore, Prof. Stone, of New Orleans, and Prof. Marsden, of Canada, were visitors this morning, and were assigned seats on the platform.

A communication was received from the Medical Profession of New Orleans, inviting the Association to meet in that city at their next Annual Meeting. The communication was temporarily laid on the table.

A number of papers were received and referred to the various committees.

The Association then took a recess of fifteen minutes, so as to give the various State delegations an opportunity to select a member from their respective States to form the Nominating Committee for the ensuing year. This committee (one from each State,) are empowered to nominate all officers for the Association.

At 10 $\frac{1}{2}$ o'clock the Association reassembled, when the various State delegations sent in the name of the delegate they had selected to form the nominating committee.

The following are the names selected: Maine, Dr. N. P. Monroe; New Hampshire, G. B. Switchell; Vermont, none; Massachusetts, H. R. Storer; Rhode Island, Bullock; Connecticut, Woodward; New York, Armsley; New Jersey, Lilly; Pennsylvania, Pollock; Delaware, Asken; Maryland, Hellsby; Virginia, Owen; West Virginia, Cummins; Georgia, Arnold; Ohio, Mussey; Illinois, Hildreth; Tennessee, John Keller; Alabama, Wetherby; Indiana, Sutton; Iowa, Cleaver; Michigan, Palmer; District of Columbia, F. Howard; United States Army Surgeons, Otis.

After the reading of the names and their acceptance, it was resolved that the committee retire at once to organize.

While the committee were absent, several papers were received and referred to various committees.

Dr. Tyler made an explanation in reference to the visit to Chief Justice Chase's house. He read a note of invitation to the Association from Judge Chase, extending to them an invitation to visit his house on to-morrow evening, when he would feel honored and delighted to receive them.

The delegates visit Senator Morgan's house this evening.

Prof. Gange, of the Prince Albert Veterinary College, London, being present, was invited to a seat upon the platform. He acknowledged the compliment by a few remarks. Prof. Gange is the author of a valuable work on the rinderpest.

Senator Drake, of Missouri, entering the hall, was invited by the President to a seat upon the platform, and, thanking the Association for their courtesy, remarked that he had called in to

see the worthy Chairman upon some private business, and had no idea of being so highly honored as to be called to the platform. He spoke in feeling terms of the long-continued intimacy that existed between Prof. Goss and his (the Senator's) father, Prof. Daniel Drake.

A number of names of physicians were received as candidates for membership to the Association. They were referred to the proper committee.

A letter was received and read, inviting the Convention to hold its next Annual Session at Fauquier, White Sulphur Springs, Virginia. Referred.

Dr. Palmer, Chairman of Committee on Medical Education, submitted a report of some length, which was listened to with marked attention by the Convention.

It was referred to the Committee of Publication, and ordered to be printed.

On motion, Dr. Thomas J. Bunn, of the Choctaw Nation, was admitted as a delegate.

Dr. Mendenhall then submitted a written report, in great detail, on medical literature. Referred to the Committee on Publication.

On motion, the communications in relation to the place of holding the next Annual Convention were taken up, and referred to the Committee on Nominations.

On motion, the Chair was authorized to appoint a committee of delegates to attend the Medical Convention at Montreal, Canada, in September next.

The report of the Committee on Medical Ethics, submitted yesterday, declaring that *all* persons possessing a regular medical education are entitled to admission to membership in this Convention, was taken up and discussed.

Dr. John L. Atlee, of Pennsylvania, addressed the Convention in favor of the right of female physicians to be admitted to membership and to medical consultations and discussions. He argued that though the female medical student had been kept out of the circle of the profession, yet that if properly educated she was capable of the highest attainments in medicine and surgery; that in some branches of the profession she was better qualified to serve with success and honor than male physicians. She had been ruled out because of her sex, and for no other reason, which

was evidence of prejudice on the part of the male members of the profession.

This speaker was followed by Dr. Condie, of Philadelphia, who said that if the females would confine themselves to their own sphere, and to the legitimate duties of their sex, they would, as a mass, be much better members of society. [Applause.]

The speaker then went on to speak in very complimentary terms of the sex. He said that we had female physicians among us, some of whom were well calculated to the work of the profession, but he thought it would be bad policy to make any law upon the question, but that rather every doctor should be left to his own inclination and sense of propriety as to consulting with them. The last speaker had said that he wanted the females left alone. As for himself he happened to be in a situation to have several females to dispose of, and he didn't want them to be left alone. [Laughter and Applause.] He desired to have this question left alone. The more opposition, in his opinion, to the female physicians, the more we should have of them among us.

Dr. Davis of Chicago, followed, saying that there was nothing in the American Code of Ethics in relation to sex; nothing preventing her from coming within the rules of medical practice. He thought no local association had a right to come into this Association and get us to pass a side resolution in relation to this matter. Let the local associations take care of themselves. Let Philadelphia look after herself and her own females.

The speaker then went on to deliver a warm and eloquent eulogium upon the female character, which was attentively listened to and vociferously applauded by the members. He thought if any women was of opinion that she could perform some of the duties of the men, let her do so; and if any of our sex think they can perform the duties of the domestic household better than woman, let them undertake it. He was in favor of the largest liberty in this respect.

He moved now that the whole matter be indefinitely postponed.

The motion was almost unanimously carried amid great applause.

The resolution in relation to the resignation of Dr. Homberger was taken up for consideration.

It was moved by Dr. Payne, of New York, that the name of Dr. Homberger be stricken from the roll of the Association, because he had violated the code of ethics.

Dr. Howard objected to the striking of Dr. Humberger's name from the roll on the testimony of a single accusation. He moved that this matter be referred to a committee of three, with instructions to investigate and report.

Dr. Arnold, of Georgia, denied that it was a single accusation. He stated that the testimony was abundant and well proven. The acts of this Dr. Homburger were disgraceful to the profession.

Dr. Noell, of Baltimore, obtained the floor and read the advertisement of several doctors and testimonials from physicians in practice, of the qualities of certain quack medicines, and held that it would not be honest or proper to strike Dr. Homberger's name from the roll until the skirts of the Association were clear of the same sin. It was a question of advertising, and he wanted it to be decided whether members of this Association should be permitted to lend their names to indorse the specialties of quack doctors.

Dr. Raphael, of Baltimore, thought too much importance was given to this question. Dr. H. had resigned, and it ought to have been accepted, though he was no doubt glad of the advertisement given him.

Dr. Davis, of Chicago, reviewed Dr. H.'s relations to the Society, and said the real question was, Shall a member who defied its rules be permitted to resign? This was last year referred to the Committee on Ethics, who reported the resolution. He thought the simplest plan to get rid of him and his humbugs was to accept his resignation.

Dr. Palmer, of Michigan, insisted that a resignation required the action of the Society. Dr. H. violated its plainest rules. He should therefore be expelled.

The vote for the expulsion of Dr. H. passed without dissent.

Dr. Hartman offered a resolution concerning those Baltimore physicians who indorsed, in a newspaper advertisement, a certain foreign specialist, and pledging the Association to a more accurate defining of its position.

Dr. Atlee thought the local societies should settle this question.

Dr. Gross thought they ought to be careful about censuring gentlemen, for their names were sometimes used without authority.

Dr. Mayberry insisted that some action should be taken at once.

The resolutions were referred to the Committee on Ethics, when the Society adjourned, the members repairing to their several sections.

EVENING.—The microscopical exhibition in the lower hall of the Army Medical Museum, on Tenth street, was one of the finest ever witnessed in the United States. The entire Association was present, as well as a large number of prominent Government officials. Previous to the exhibition the guests spent several hours in examining a large collection of anatomical specimens collected in the upper hall.

The exhibition was conducted by J. J. Woodward, and proved most interesting to all present. The members of the Medical Faculty manifested their admiration at the success attained in photographing anatomical specimens, by their enthusiastic applause.

The enjoyment of the day terminated with a brilliant reception at the residence of Senator Morgan.

THIRD DAY.—The association resumed its session at nine o'clock—the President, Dr. S. D. Gross, in the chair.

The attendance of delegates was about the same as on the preceding days. There were a few visitors in the gallery. A number of valuable works on medical subjects were gratuitously distributed among the members of the association, as were also samples of new and improved medicinal preparations.

A letter was read from Dr. Cornelius Boyle, of Fauquier, White Sulphur Springs, Virginia, inviting the association to hold its next annual meeting at that place; which was referred to the committee on invitations.

The reports of the treasurer and publication committee were then read and accepted.

The report of the committee on nominations being in order, the same was presented, and after some debate it was accepted. The report names New Orleans, Louisiana, as the place to hold the next meeting of the convention, and fixes the time for May next. The following officers of the convention were nominated by the committee: President, Wm. O. Baldwin, of Alabama; first Vice President, George Mendenhall, of Ohio; second Vice President, Noble Young, of Washington, D. C.; third Vice President, Dr. N. P. Monroe, of Maine; fourth Vice President, S. M. Bemis,

of Louisiana; Treasurer, Dr. Caspar Wistar, of Philadelphia; Committee on Publication, Dr. Francis G. Smith, Jr., of Philadelphia, (chairman); Dr. Wm. B. Atkinson, of Philadelphia; Dr. H. F. Askew, of Delaware, Dr. Richard M. Cooper, of New Jersey; J. H. Lovejoy, of the District of Columbia; Dr. Wm. Maybury, of Pennsylvania.

Dr. Maybury offered as an additional amendment to article five, plan of organization, "No report purporting to emanate from any committee shall be received unless it be signed by a majority of its members." Laid over.

The Secretary suggested to the association that the business of the Publication Committee was rapidly on the increase, and that the funds on hand were not adequate to meet the expenses of printing all the proceedings as they should be.

The Committee on the President's Address made their report accompanied by the following resolutions:

1. *Resolved*, That the Publishing Committee are hereby invested with plenary power in regard to all papers not read before the association, or in the section to publish or not, as may seem expedient.

2. *Resolved*, That a committee of three be appointed by the Chair to take into consideration the subject of appointment of a commissioner in each judicial district or circuit, whose duty it shall be to aid in the examination of witnesses in every trial involving medical legal testimony, and to report at the next meeting of the association.

3. *Resolved*, That a committee be appointed to report next year in regard to the subject of our annual register of the regular profession in the United States, and in the mean time to take necessary measures to carry the plan into effect.

4. *Resolved*, That a committee be appointed to take into consideration the subject of the best mode of providing a fund for the relief of widows and orphans of deceased physicians, and report to the association at the next meeting.

5. *Resolved*, That a committee of three be appointed to take into consideration the subject of the establishment of veterinary colleges, and report at our next meeting.

6. *Resolved*, That all hospitals and public institutions for the care and treatment of the sick, should have educated, well trained nurses only; that this association would strongly recommend the establishment in all our large cities of nurse training institutions.

The first five resolutions were adopted, and the sixth was referred to a special committee consisting of Drs. S. D. Gross, of Philadelphia; Elisha Harris, of New York; and Charles Lee, of New York.

The Chair then announced the following committees:

Commissioners to Aid in Trials Involving Scientific Testimony—Drs. John Ordeonaux, of New York; A. B. Palmer, of Michigan; Stephen Smith, of New York; J. W. Dunbar, of Baltimore.

Annual Medical Register—Drs. Packard, of Philadelphia; William B. Bibbins, of New York; and Ellsworth Eliot, of New York.

Devising a Plan for the Relief of Widows and Orphans of Medical Men—Drs. J. H. Griscom, of New York; N. S. Davis, of Indiana; and A. C. Post, of New York.

Veterinary College—Drs. Thomas Antisell, of Washington, D. C.; C. A. Lee, of New York; and John C. Dalton of New York.

He also appointed the following delegates to represent the American Medical Association in Canada, to meet in September next: C. A. Cox, M. D., L. L. D., of Maryland; Drs. John Atlee, of Pennsylvania; N. S. Davis, of Illinois; Charles Lee, of New York; Grafton Tyler, of the District of Columbia; W. M. Wood, of the Navy; and S. D. Gross.

On motion of Dr. Howard, of Maryland, the following gentlemen were appointed to prepare and submit at the next meeting of the Convention a report on the subject of specialities of medicine: Dr. E. Lloyd Howard, Frank Donnelson and Christopher Johnson, all of Maryland.

Dr. C. C. Cox, of Maryland, then read the report on American Medical Necrology, which occupied some time, and was ordered to be printed.

There were several resolutions offered and appropriately referred.

At twelve o'clock Dr. Atlee, of Pennsylvania, escorted to the platform the newly elected President, Dr. Wm. O'Baldwin, of Montgomery, Alabama.

The appearance of these gentlemen was the signal of enthusiastic applause, and when silence had been restored, Dr. Atlee introduced Dr. Baldwin to the Convention through the retiring President, Dr. Gross, and the manner in which the latter welcomed his successor thrilled the hearts of all present with patriotic joy. Dr. Gross said:

"I welcome you as the representative of our long lost brethren. May God bless you; God bless your people; God bless all of us."

Dr. Baldwin then proceeded to address the Association. He thanked the members for the honor in a happy manner, saying that he regarded it not so much a compliment to himself, "but rather as the faithful hand of brotherhood, stretched out with a generous friendship and true nobility of soul in its desire to heal and obliterate the wounds in its bosom, for whose creation it was in no way responsible." He then recited something of the feeling among the Southern brethren to the effect that they did not, many of them at least, feel quite welcome—that they were not political and social equals, etc. But closed with the hope that *Charity, Forgiveness and Fraternal Love* would yet wipe out all traces of bitterness.

During its delivery the speaker was frequently interrupted with applause, and on concluding was the recipient of the hearty congratulations of those on the platform.

The President, Dr. Gross, said he desired to avail himself of this opportunity to correct an erroneous statement which had gained publicity throughout the Southern States, in regard to a resolution alleged to have been passed by this Association, recommending that the Government should make surgical instruments and medicines contraband of war. He said, "I take this occasion to deny that the American Medical Association ever passed any such resolution and hope that our President elect will do everything in his power to promulgate this fact among our Southern brethren."

Dr. Davis desired to say in addition that not only had no such a resolution ever been adopted, but that it had never been introduced.

This statement was on motion, ordered to be recorded in the transactions of the Association.

An invitation was received from the Young Men's Christian Association, of Washington, for the Medical Association to visit their library and reading-room.

On motion, the Committee on Archives was continued.

On motion, the Secretary was instructed to appoint a Sub-committee of Arrangements of three from each State.

Dr. N. S. Davis, of Illinois, offered a resolution instructing the Chair to appoint a committee of three, to report at the next session, on the practicability of establishing a library of American

medical works, including books, monograms and periodicals. Adopted. The Association then adjourned till nine o'clock, Friday morning.

In accordance with the invitation extended to the members of the Association they assembled at the Capitol last evening to witness the illumination of the dome. The several sections were lighted, and the manner in which the electrical apparatus is worked was explained by Prof. Gardner to the ladies and gentlemen present.

The reception at the residence of Chief Justice Chase was attended by the delegates in a body, and an hour was pleasantly passed in conversation and in enjoying the hospitality of the house.

The reception at the residence of Mayor Wallach took place at ten o'clock, and was attended by all the delegates. It formed a brilliant conclusion to the cordial welcome extended to the distinguished representatives of the profession by the people of Washington. The remainder of the evening was spent in social enjoyment. A sumptuous repast was provided, and the party did not separate until a late hour.—(*Conclusion next month.*)

Cincinnati Academy of Medicine.

JOHN DAVIS, M. D., PRESIDENT.

J. L. NEILSON, M. D., SECRETARY

DISCUSSION ON DIPHTHERIA—(CONTINUED.)

DR. CARROLL took the floor; said that he had come to the Academy with the expectation of meeting the gentlemen who had so fluently opposed him. He supposed they thought they had thoroughly used him up, and there was now no necessity of their coming, but he was there to refute the statements which they had made, and the Academy would always find him on hand when there were any false statements to be put down; but he did not see that anything of importance had been stated by the opposition. Dr. Graham had got up there and talked about what a desperate disease it was, and had delivered himself of a speech, which would have been quite as appropriate if he had been speaking to the Young Men's Christian Association; and other gentlemen, in discussing the treatment, had nothing better to recommend than stimulants—stimulants through all the stages and varieties of the disease. His own idea was that we only needed stimulants in the states of prostration, such as the third stage of this disease, but here they recommended him to use stimulants when there was severe inflammatory fever, to

give brandy when the pulse was high and the skin hot; all this seemed to him very strange and absurd. Dr. Richardson had insisted that Dr. West made out the differential diagnosis between Diphtheria and Scarlatina, but he (the speaker,) had looked over West since that statement was made, and found that West only mentions, in a short note, the fact that there was a variety of throat disease characterized by deposit and called Diphtheria.

Flint, it was true, in his work on 'Practice,' makes the distinction and devotes but one chapter to the whole subject; but he mentions another thing which the gentlemen did not hold to, viz.: that in the disease there is always a white deposit on the tonsils, and that he does not regard it as a constitutional disease, but merely local, and that he relies mainly upon local application. But this was the same man who had written an elaborate essay upon diagnosis and treatment of diseases of the lungs, advocating the non-abstraction of blood, but when he afterward put his treatment into practice at Louisville, out of twenty cases of pneumonia he lost eighteen. It had also been said that Dr. Wilson believed in Diphtheria, but after examining his works nothing of the kind could be found. Dr. Wilson, in speaking of deposits in the throat, mentions three varieties, viz.: a deposit found in the anginose variety of scarlatina; another variety in Tonsillitis, differing from the former, and still another differing from the others and found in a malignant disease of the throat. But instead of this last named disease (which seemed more nearly to approach the disease called Diphtheria,) being characterized by insidiousness, it came on abruptly, and if we looked into the throat early in the disease, a very dark deposit would be found on the fauces and tonsils; but even such cases as these were of the rarest occurrence. He had not seen but one case, which occurred two years ago, since 1824, and he would say that his treatment in these cases had not been stimulant. Drs. Rayer and Fothergill held the same opinions as Wilson, in not giving any position to Diphtheria, and they wrote many years after Bretonneau. In conclusion, said that he hoped gentlemen would no longer make incorrect quotations from authors with whose views they had but limited knowledge.

Dr. Sexton said that notwithstanding the gentleman's protestations of correctness, he erred in regard to Flint, for that author had very positively declared the disease to be zymotic, and the exudation a mere symptom.

Dr. Carroll reiterated his position that the author in question made no distinction between Scarlet Fever and Diphtheria, for he had said in his work that having been called to a family where cases of both diseases laid side and side, he could not divest himself of the idea that they were identical diseases.

Dr. White wished to corroborate Dr. Sexton's statements. Dr. Carroll had certainly failed in giving a correct idea of Dr. Flint's position as to the nature of the disease, for he distinctly recommends constitutional treatment, and says that he has little faith in local applications, except for their soothing effects. At the same time, Dr. Carroll had correctly said that Dr. Flint held that the exudation was a necessary symptom of the disease, holding strictly to Bretonneau's opinion. Flint's treatment was chlorate of potassa, tincture of the chloride of iron, quinine and stimulants, with inhalation of the vapor of water and vinegar.

Dr. Quinn thought the views of Dr. Bartholow, as to the conduct of the debate, were very correct. The first thing was to define the disease. In his own practice he had never been in the habit of calling a case of throat disease Diphtheria, until the characteristic exudation had made its appearance; and he thought further there was special danger of confounding simple inflammatory tonsillitis, or that ulceration of the throat, dipping down into the tonsil instead of adding to it, with true Diphtheria. This membrane could not be mistaken by the practiced observer for the membrane of true croup. But while one set of gentlemen described the disease as a mild local trouble readily amenable to treatment, and another set that it was a formidable constitutional disease and difficult of treatment, it was folly to call the treatment on the one hand successful, or on the other unsuccessful, or to attempt in any way to compare the two.

He concluded by again saying his chief dependence, as to the nature of the disease, was the presence of the exudation. In answer to Dr. Sexton, who wished to know whether he would not be justified in calling a case diphtheritic, when it had occurred in a family afflicted by the disease, and where nothing was wanting to confirm the diagnosis but the exudation, he said he would not be warranted in giving a decided opinion, for just such cases as presented by Dr. Sexton had occurred, and had resulted in nothing more than simple sore throat.

Dr. Muscroft differed from the opinions just expressed by the gentlemen, for he did not believe that the members should be

ties down to any particular point. They should stand up in the Academy and tell all they know on the subject, and the more of practical details they could give the better would be the progress of the debate. He had seen a number of cases of Diphtheria, and several varieties of the disease, and he could say with Dr. Graham, that the more fatal cases excited his profound commis-
seration, when the patients died from asphyxia, as though with a cord about their necks. It was a disease that could be confounded with various maladies of the throat, such as croup, tonsillitis and, sometimes, scarlatina. It was a blood poison, and the exudation a mere symptom of the general disease. Drs. West, Jenner, Aitkin and others, held similar opinions.

The first notice of the disease was made about three hundred years ago, under the name of Diphthera, and there was no further mention of it until the time of Bretonneau and Troussseau. It is now considered an inflammatory disease, but when epidemic is less so and seems to destroy without the production of exudation. We are told by Bard that this peculiar exudation may also make its appearance behind the ears, on the prepuce, vulva, anus, lips and other mucous or cutaneous surfaces.

To give an idea of the wide spread observations that have been made, the speaker enumerated some of the names given to the varieties by different writers as follows: Angina Maligna, Garrotillo, Morbus Strangulatorius and Dipheherite, by Severinus, Bard, Starr, Rumsey and Bretonneau. Jenner gives six varieties : (1.) *Mild*; (2.) *Inflammatory*; (3.) *Insidious*, (4.) *Nasal*; (5.) *Laryngeal*; (6.) *Asthenic*. The speaker believed that all epidemics were not necessarily fatal, for they could be mild in character when all the characteristics were well marked, but of little intensity. He had himself seen it so mild that there were merely a few specks of membrane developed on the mucous folds of the mouth. He could see no mystery in the development of mild epidemics, for the same thing had been shown in cholera, and who would hesitate to call the varioloid disease the result of small pox poison? That the mild form did exist and like other zymotic diseases could communicate the most malignant form, he illustrated in the case of his son, who perished with the most aggravated form of the disease, contracted by kissing a young lady in whom the disease had manifested itself so mildly, that she was not deterred from her ordinary pursuits, and complained only of sore throat. It was not necessary

for gentlemen to insist that cases of reported Diphtheria were not correctly diagnosed, because they were not fatal in character. It was true that the mild cases were more difficult of diagnosis, but the malignant forms were unmistakable. The disease could, however, always be certainly diagnosed by the early presence of albumen in the urine, which did not obtain until the last stages of croup and scarlatina. The insidious form was the worst, and, in some cases, the fever would come on, followed by sore throat, and in forty-eight hours the exudation would have descended, step by step, to the bifurcations of the bronchial tube, and even has been found in the stomach. He had had his first case of the disease ten years ago, where the patient had articular rheumatism, and in a few days her throat became covered with exudation of the diphtheritic type. He had seen a great number of mild cases this winter with the patchy exudation. Among the varieties he mentioned a case where the patient expectorated long strings of membrane, and he believed the patient labored under the true Diphtheria.

There had also come under his observation another variety which he did not believe was mentioned in the books. Children would be taken with slight fever, slight huskiness of voice, some swelling at the angle of the jaw. Upon looking into the throat there would be no evidence of membranous inflammation, not even redness; but when the involuntary movements of the fauces were excited by the introduction into the mouth of the tongue depressor, spoon or other foreign body, mingled pus and mucous would well up out of the pharynx. Such cases were almost invariably fatal and perished by suffocation. The prostration from the beginning of the disease was severe. The patients did not display any violent sufferings, but would linger on for weeks, giving hope to the friends. He remembered but two cases of recovery, and one of these, an adult, was invalidated in about a month, but did not recover her voice until some time after. This treatment consisted of tonics and stimulants; tincture of the chloride of iron internally and locally. He was accustomed to give early to his worst cases calomel, opium and quinine, and to use both locally and internally, a solution containing bromine, bromide and iodide of potassium, and the nitrate of potassa. This treatment he could recommend from actual experience. Thought it was always necessary to use some form of alterative, not, however, carried to ptyalism. He also men-

tioned a case of extension of the disease from the anterior nares to the throat. He thought the best vapor for inhalation was the steam of water, especially for children, but in adults the water may be medicated with vinegar, salt, bromine, etc. Dr. White asking if the peculiar variety of the disease he had mentioned as characterized by welling of pus from the pharynx, might not be retro-pharyngeal abscess, the speaker answered that he never had had an opportunity to verify by autopsy.

Dr. Carroll took the floor to correct an error which he had himself made in regard to Dr. Flint, who, he had found, did believe in the constitutional form of the disease, but at the same time laid much stress upon the local manifestations, and enumerated a large number of topical applications for its relief. Dr. Flint also believed in the stimulant plan, and recommended a variety. He warned physicians against calling sore throat without deposit Diphtheria, and also against confounding with it Scarlatina and Tonsillitis, although he had said that upon seeing cases of Diphtheria and Scarlatina lying side and side in the same family, he could not divest himself of the idea that they were identical diseases. The speaker thought himself that Scarlatina simulated Tonsillitis, but there was a marked difference in the exudations, the one being more delicate, thin and friable, the other thicker, tougher and better organized.

Dr. Tanner also believed that although Scarlatina and Diphtheria are distinct diseases, they may co-exist; that Diphtheria is liable to repeat itself unlike Scarlatina, which is self-limited. Mentioned case that had a number of attacks of Diphtheria, and finally died of the disease. Dr. Flint did not believe it was self-limited. The speaker said if this doctrine were true that the disease could repeat itself again and again in the same person, and also came on insidiously, it would soon depopulate the world. It had been said that this disease Diphtheria had been recognized three hundred years ago, while the fact was that not until one hundred and fifty years ago had any classification been made, small pox, measles and scarlatina previous to that period being thrown together in one class, and even one hundred and fifty years ago the zymotic character of the diseases was not recognized. He thought the gentlemen in observing the very rare cases of scarlatina which repeat themselves, had got their ideas of a new disease which was not limited by one attack. He believed the poison was the same, and that this class of diseases, never

or so rarely as not to be considered, repeated itself in the same individual. Some gentlemen were in the habit of calling repeated attacks of swelling of the tonsils Diphtheria; he had had an illustration of this manner of disease in his own family, his daughter having been left with a weakness of the throat and liability to swelling of the tonsils when she took cold, the sequelæ of scarlatina, but he had never called these attacks diphtheritic.

Dr. John Davis spoke as follows: He had been surprised in the beginning of this discussion at the position taken by certain gentlemen, in regard to his definition of Diphtheria, they appearing to think that it was a new and remarkable idea to quote Bretonneau, regarding him as too old and obsolete authority. Dr. Bartholow had met his position that Bretonneau was the acknowledged authority in chief on the definition of the disease, by speaking disparagingly of that author, saying that he had written a treatise on the subject, and afterwards several memoirs to refute the positions which he then assumed. The facts in the case were these: his first paper was a correct description of an epidemic of sore throat which happened in his neighborhood at Tours. This description has been given us as a type of the disease Diphtheria, and upon this foundation we must rest all definitions. From the views which he enunciated at the time has he in no important particular departed, nor have any after him.

It had been said, also, that his five memoirs were written to refute this description, but on the contrary they were histories of successive epidemics, and were written to establish more fully the views which were already before the public. Thus his declaration that exudation necessarily accompanied Diphtheria, was undoubtedly true so far as it referred to the epidemic described, for so thoroughly did he investigate the matter that when it was denied by his brother practitioners that the exudation was invariably present, he exhumed their patients and found it in the posterior nasal cavities, in the larynx and in other portions of the body, where, before death, it could not possibly have been demonstrated. From the positions which he took in regard to the disease at first, did he only in one particular afterward depart, and one of the memoirs was written to show that he had discovered, in successive epidemics, that the disease became constitutional from the local toxæmia. In the observations of succeeding years it was found by Trousseau and others, that the

disease was constitutional from the beginning, and that many were killed by the disease without participation of the larynx. This opinion of Rousseau was published in 1855, and Bretonneau issued a paper the same year, which he (the speaker,) had not been able to see, but he did not doubt that if the two were compared they would be found to substantially agree. Yet, in the face of all this, he had been told by the gentleman that he was going back to obsolete views, that he did not represent the modern ideas, while the gentleman in question quoted as the newest, the most novel, the French ideas, the writings of the very man who deferred in every respect to Bretonneau, who frequently and copiously draws from this fountain head of literature upon the subject of Diphtheria.

Bretonneau's general definition of Diphtheria, that it is to be understood as a generic term, including all forms of epidemic sore throat, has been adopted by all the distinguished writers upon this subject, and his postulates also by some in full and by all so much of their substance, that it is the generally adopted view that all epidemic affections of the throat have characteristics in common, such as to justify their being held as only different forms of the same disease. Bretonneau's History of Diphtheria, which is only a history of epidemic sore throat, has also been generally accepted. The French writers have followed him closely, their publications being only descriptions of epidemics of sore throat that have appeared in France since the date of Bretonneau's publications. They find different epidemics to present differences in form. Isambert, Becquerel and Rousseau, defer to him, although it is true they say some departures from Bretonneau's first view must be made in consequence of their failure in later epidemics of sore throat; that in many instances it is constitutional, and that it is frequently attended by ulcers. Yet we are told that Bretonneau is not the French authority, when these are the only modifications to the present day made by the French.

Geursant, in his article on Croup, translated in the volume on Diphtheria of the New Sydenham Society, follows Bretonneau and accepts his History of Diphtheria. Empis, on Diphtheria, published in the same book, accepts Bretonneau as to the essential nature of the disease. More than half the book on Diphtheria, issued by the New Sydenham Society, is made up of transactions of Bretonneau's publications on the subject. This volume was published in 1859, and shows the estimation in which the

Brittish authorities held Bretonneau's authority on Diphtheria. The "London Lancet Sanitary Commission," in 1859, made a report on Diphtheria, and based all their statements, as to the nature of the disease, on the writings of Bretonneau, quoting from his History of Diphtheria so copiously that they evidently received it without question. An able review of the publications on Diphtheria, in the "British and Foreign Medico-Chirurgical Review," accords to Bretonneau, in general terms, the individual place of authority upon the definition of Diphtheria. Dr. Aitken, who certainly can not be considered very ancient authority, in his definition of Diphtheria, shows that he adheres more closely to Bretonneau's views than even some of the French writers. He adopts Bretonneau's Theory of Diphtheria, even to believing that General Washington's life was terminated by this disease. He believes with Bretonneau that it is a specific disease, and so does Dr. Tanner and other late authorities.

Greenhow, a noted British authority on epidemics, defers to Bretonneau, and, on page thirteen, of his work on Diphtheria, speaks as follows: "It would have been, perhaps, better to have retained the English name, 'epidemic sore throat,' or the older term, 'angina,' as the generic term of such epidemics; but as the word Diphtheria is now in ordinary use for one form of the disease, I should employ it as a generic term for the whole epidemic."

Slade in his volume on Diphtheria, says: "To find what is included under the term Diphtheria, we have to turn to the History of Epidemic Sore Throat." In Thomas' Pronouncing Dictionary, and in Dunglison's Medical Dictionary, we have definitions based on Bretonneau's opinions. The speaker then said that he had only followed the example of this long list of great authorities in presenting and adopting as his own Bretonneau's definitions; and it was impossible for any one to do otherwise, for as the disease was first observed, named and classified by Bretonneau, it was of him and with him, and when we adopt the name, we must necessarily go back to him who was the parental and fountain head of authority. If we adopt any new term for a disease, we must take it as expressed by the author of the name; for instance, by adopting Dr. Murchison's name for typhoid fever, viz.: Pythogenetic Fever, we must adopt the disease as described by him, as being produced from the absorption of putrid material into the blood, and not as Dr. Bartholow or any

other gentlemen may attempt to interpret it. And he would say to the gentleman who quoted Troussseau as differing with Bretonneau, that Troussseau did not seek to change Bretonneau's definition, which was impossible; but in his writings necessarily quoted Bretonneau, and adopts such modifications as the succeeding epidemics have warranted, certainly taking a license that must always be allowed, since, as his friend Dr. Murphy had very well said, and as was well known to all, the essential nature of the disease did not vary, although the epidemic, the country, the conditions surrounding individuals, and even the peculiarities of individual constitutions would modify it; there still remaining a sufficiency of characteristics in each form to establish its identity. The gentlemen who, to the entire exclusion of Bretonneau's authority, quoted Troussseau, the pupil of Bretonneau, who has only described some of the later modifications of the disease established by his great master, might, with equal truth and pertinence, attempt to embody the *genus exanthemata* in a description of measles, which is only one of its species.

The speaker was here interrupted by Dr. Bartholow, who wanted to know whether he assumed that Diphtheria was a generic term for all epidemic sore throat. The speaker reiterated his position in the affirmative, as before stated. Dr. Murphy wanted to know what was meant by the term "sore throat," had it any meaning? He was referred to the History of Diphtheria as it would be impossible just then to enumerate the great varieties.

Dr. Davis then went on to say that Dr. Carroll had taken the position that there could be no cases of Diphtheria without the characteristic exudation, but the gentleman restricted the disease too closely, indeed he confined it to narrower limits than had Bretonneau himself, and he did not believe he would find any authority of consequence to agree with him. He had no sympathy with gentlemen who so resolutely refused to receive established authority on disputed points. As to the dissimilarity of the disease and scarlatina, which had also been denied, he thought had been very satisfactorily settled by very competent authority; although as late as 1860, some among the English societies had denied the dissimilarity. There was one marked difference in that Diphtheria was liable to return, while the recurrence of scarlatina in the same persons was the rarest occurrence. In answer to Dr. Quinn's query as to whether Influenza, which was

one form of epidemic sore throat, should be called Diphtheria, he asked time for consideration.

Dr. Quinn thought his question was of great practical significance, for if we were to include under the head Diphtheria, epidemic influenza, of which the immense majority got well without treatment, our success in the treatment of Diphtheria would be in like proportion. If, as was claimed by Dr. Davis, it was the generally received opinion of the profession that all epidemic sore throat was Diphtheria, he wanted it so understood by all; not that he cared for the mere name, but that in reporting statistics, all members of the profession might have the advantage of such liberal embodiment of the varieties of throat trouble, in one name.

Dr. Murphy thought the Academy was in great danger of running into a prolonged discussion of the niceties of nosology. He had considered the disease as it existed in Cincinnati, and he thought it was the duty of the gentlemen, who were attempting to enlighten the Academy, to speak of the disease as they have seen it at the bed-side of their patients in our midst. He had taken the position that no epidemics are the same in all places, as shown in the post-mortem examinations of persons who had perished by cholera in different places not agreeing in any two localities. Keeping this fact in mind in regard to Diphtheria, he could see the great importance of knowing what it is, and how it is to be treated right here at home. It was no help to the practitioners of this city to know what this gentleman has said of the disease as it appeared in his time and locality, or that one as he observed it in his neighborhood, detailing the infinite varieties which, as he had said before, were as numerous as climate, condition and individuals, could make them. He decidedly objected to the use of the term "sore throat," as it was an inexact term, used most frequently by unprofessional and uneducated persons.

When we are told by a patient that he has sore throat, it means absolutely nothing to us, except that it directs our attention to the seat of the difficulty, for it is a vague expression which may denote difficult deglutition, obstructed respiration, inflammations of various kinds of passages of the throat, or it may evidence the presence of a foreign body; in short it is valueless as a technical or scientific term. In the course of the discussion this indefinite term "sore throat," had been applied to

the diagnosis of Diphtheria in such a manner as to make listeners believer that for the establishment of a genuine case, it was only necessary to have sore throat to prove that the patient would have the general disease, that he would become toxæmic. If such was the doctrine held he could only characterize it as monstrous. If the definition that all cases of epidemic or endemic sore throat were Diphtheria was to be received without question, what would become of statistics? Of course under such a classification there must be an enormous percentage of cures. But he would ask how many cases of cures might we expect to have in those other well established and formidable cases of this disease? For he was frank to say, in the face of this array of successful results, that there was no disease next to cholera which he so much feared. But it was to be remembered that he had seen numbers of cases of sore throat trouble which he could not call diphtheritic, whatever might be other gentlemens opinions of the disease. He must have the presence of the pellicle, and when he saw this extending down into the pharynx he had every apprehension of a fatal result. He knew that his friend, Dr. Davis, was honest in his opinions, and that he had very nicely gathered together the authorities, and was backed up by the necessary reading, but he thought when he brought this doctrine down to the bed-side of the patient, it would be found not to be the true one, and he could not himself believe it to be so after attentively reading Trousséan.

In conclusion said he was seeking for the truth, and would like to learn, from the discussion, what were the views held of the disease as it appeared here, and what is the treatment, for it was a great point, practically, to remember that each epidemic must be judged by itself that it is a law to itself, instancing as a case in point the meeting of physicians in this city, December, 1848, to agree as to the treatment of cholera; upon the recommendation of those who had passed through the epidemic of 1832, the opium treatment was adopted, but it was abandoned in less than three months, because it was found to be valueless when put into practice.

Dr. Quinn said it was necessary, before entering upon the therapeutics of the disease, to get a full and reliable definition of diagnosis. He thought that with a slight modification, Dr. Davis' definition would be quite sufficient, viz.: to add the word "exudation," to "epidemic sore throat;" Diphtheria, in his opinion,

being essentially *epidemic sore throat with exudation*. And when he had said, in a previous meeting, that he never diagnosed a case of sore throat as Diphtheria, unless the exudation was present, he had not wished to be understood as believing there never could be a case without exudation. Ten years ago Dr. Murphy had seen, with him, a case which bore all the unmistakable evidences of true Diphtheria, and he had not had occasion since that to change his opinion as to what was absolutely necessary to establish the identity of the disease. Exudation might exist and yet be situated where the eye could not reach it; we may, in such cases, make a comparative diagnosis; we might draw conclusions from other marked symptoms, but the absence, to our senses, of the exudation must, in all cases, preclude a positive opinion. If we called all sore throat Diphtheria, we would have a very light percentage of mortality; but as for himself, like his friend who had just spoken, he could say that he always approached the disease with great apprehension.

Dr. White thought Dr. Quinn was certainly mistaken when he took the position, that we should not pronounce upon a case of Diphtheria when the exudation was absent, and, undoubtedly, in diagnosing this disease, whose first and primary developments were constitutional, he should not have confined himself, for the determining symptoms, to the fauces. As Dr. Murphy had suggested, he would bring the matter down to the bed-side of the patient. We have a patient presenting himself, complaining of not feeling well, but unable to say, exactly, from what arises his discomfort; wanting both physical and mental energy; having loss of appetite; probably a feeling of pain in his limbs with chilliness, in fact all those symptoms common to the early stages of all zymotic diseases, and comprehended under the general term of *malaise*. We can not say from the patients description, what his disease is, but if, in the course of a systematic examination, we look into the throat and find redness, vivid or dark colored, perhaps, some intumescence of the mucous membrane of the fauces, and although there may be no membranous exudation, nor even a recognition of throat trouble by the patient, still, putting together the general and local symptoms, particularly if it be in a time of epidemic sore throat, we may, with little hesitancy, call the case diphtheritic, and, in a great majority of cases, the diagnosis will be confirmed in the next forty-eight or seventy-two hours by the appearance of a copious exudation.

With these general symptoms of blood poisoning, and with the previous history of the case, there could be no possibility, as suggested by Dr. Murphy, of confounding with cases of Diphtheria, that local sore throat produced by indigestion or debauchery, or those other more positive diseases of Follicular Tonsilitis, Nasal Catarrh, etc. And considering the disease as a blood poison, he thought the chief agents in the treatment were, as taught by a great German physician, fresh air, cold water and nourishment. It had been said that the disease varies in different localities and epidemics, and he believed that the seeming diversity of sentiment among authorities, was due to the peculiar prominence in each place and epidemic of a certain symptom or set of symptoms. For instance Troussseau and other French writers class together the laryngeal form and membranous croup, probably because the laryngeal form is observed in France greatly in excess of other forms. The Norwegian, Sweedish and German authorities agree with the French, but the English and American hold that they are different.

The speaker then gave the differential diagnosis between Diphtheria and Croup, quoting from English and German authority, giving it as the general opinions of the American profession. Dr. J. Warrington Howard, in the St. George Hospital Report, says : "Diphtheria is an acute, specific disease; Croup is a local inflammation. Diphtheria is contagious; Croup it not. Diphtheria is an asthenic disease; Croup is a sthenic inflammation. The exudation in Diphtheria attacks first the fauces and larynx; but in Croup, the trachea. Diphtheria attacks persons of all ages; Croup is a disease of children. In Diphtheria there is usually albumen, in Croup not. Diphtheria is frequently followed by nervous derangements, which do not occur after Croup. In Diphtheria changes occur in the spleen, which are not found after Croup. In Diphtheria blood changes occur, which are not observed in Croup."

Prof. Schuler, of Vienna, in combatting the theory that croup and Diphtheria are only modifications of the same disease, says : "In croup the exudation is upon the surface, in Diphtheria in the tissues of the mucous and sub-mucous membranes.

The croup membrane is fibrous with additional pus corpuscles, the diphtheritic membrane is reduced to an amorphous mass, and acts destructively upon organic tissues, while the deliquescence of the croupy membrane does not affect the mucous membrane

in its entire structure. The clinical picture of the disease is also markedly different. In clear croup the exudation begins in the larynx and spreads downward into the trachea and frequently into the bronohiae, while the pharynx and tonsils are spared. Diphtheria pursues a different course; the exudation begins in the fauces, pharynx and tonsils, together with swelling of the glands, fever and quick collapse." He also gives all the distinct phenomena of an infectious disease as characteristics of Diphtheria, while croup is never infectious and never produces Diphtheria.

Editor's Table.

THE AMERICAN MEDICAL ASSOCIATION.—We occupy a large space in our present number with the transactions of the American Medical Association at its recent meeting in the city of Washington. It will be observed that there was an unusually large attendance of members, that a gentleman from Alabama was elected President, and that New Orleans is designated as the next place of meeting, all of which looks like a return of the South to its old active participation in the proceedings of the Association.

The address of Dr. Gross is pronounced very fine, and several committees we observe are appointed to make reports in accordance with some of its suggestions.

The question of Women's Medical status was again laid on the table, still we understand the sentiment to be, that doctors will consult with female physicians, and recognize them just in accordance with their own personal tastes, without any liability to censure, common ethical principles controlling the judgment.

The Committee on Prize Essays reported adversely to the claims of all that competed, though one or two essays were regarded favorably. The entertainments were of a pleasant character but the steady sentiment of the Association is evidently adverse to such profuse dissipation as has been the rule of late, we hope, however, that we shall not now go to the other extreme and thus sacrifice that social feature which has been one of the most delightful, and, we believe, important attractions of the Society.

Dr. Baldwin in thanking the Association for his election, took occasion to allude to some of the causes of coyness on the part of Southern physicians towards attendance on our meetings, and we were glad that an opportunity was thus given to make an emphatic denial of the charge that the Association had advised

the Government to declare medicines and medical supplies contraband during the late war. That charge was recently assumed by the *Richmond Medical Journal* to be true, and now that this slander has been disposed of, we trust our Southern brethren will be willing to distrust the probability of other stories which may have contributed to ill feeling. We do not doubt the meeting next year will be well attended. We already hear of many Western physicians who declare their purpose to visit New Orleans at that time.

CINCINNATI ACADEMY OF MEDICINE.—The meetings of this Society are well attended. For several weeks past the paper of Dr. John Davis on Diphtheria has been under discussion. We have already published copious extracts from the debate, endeavoring to fairly represent the views of all who have taken part, but of course in so lengthy a discussion, it will be impossible to give space for anything approaching a full verbatim report. Besides gentlemen in the excitement of debate, are prone to repeat themselves. This has been the case in the present instance. We regret that in this exhaustive effort to determine the nature of this disease, we have not had more of the pathology of the affection, post mortem conditions, and the philosophy of its therapeutics. Such points would tend more to get us on the true track. Nevertheless there has been a great deal said, especially in the way of personal experience that must prove valuable to those who have heard and those who may read. We shall continue our selections from this debate in our next number.

DETROIT MEDICAL COLLEGE.—We learn that a new School of Medicine in Detroit is a fixed fact. This of course grows out of the recent action of the Regents of the University, and if thereby is secured a good school with fair clinical advantages, we shall feel that the Regents have unwittingly done a good thing for their State and the profession of the North-West. Drs. Armor, Jenks, McGraw, Andrews, Farrand, and Duffield are spoken of as among the Faculty of the new Organization.

ANNOUNCEMENT OF THE OHIO STATE MEDICAL SOCIETY.—The Executive Committee take this method to announce to the Medical Profession, that the Ohio State Medical Society will convene at Delaware, Ohio, on the first Tuesday in June next, at 10 o'clock A. M.

This city is central in its location, on the C. C. & C. Railroad, mid-way between Cleveland and Cincinnati, and accessible by

rail from all parts of the State. And, on account of its literary institutions, its extensive libraries and cabinets of rare selections, and its pure White Sulphur Springs, will afford superior attractions for the members of the Society during the hours of recess.

Arrangements have been affected with the hotels for the accommodation of members and visitors on very reasonable terms, and are being made also with the Railroad managers to secure half fare.

Scientific reports of much interest will be presented to the Society on the various branches of Medicine and Surgery.

Popular and Scientific lectures will be delivered by distinguished gentlemen, each evening of the association.

No effort will be wanting to make this the most attractive, interesting and profitable session, as well as the largest ever held by the Society.

E. H. HYATT, M. D.,	}	Executive
T. B. WILLIAMS, M. D.,		
C. P. LANDON, M. D.,		

J. B. THOMPSON, M. D.,	Committee.
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DELAWARE, O., April 28, 1868.

IMPORTANT LAW.—KEMP'S MEDICAL BILL.—The following is the important bill introduced by Dr. Kemp, of Montgomery county, which has just passed both branches of the Ohio Legislature, and is now a law:

A Bill to protect the citizens of Ohio from Empiricism and elevate the standing of the Medical Profession.

SECTION 1. *Be it enacted by the General Assembly of the State of Ohio,* That it shall be unlawful for any person within the limits of said State, who has not attended two full courses of instruction and graduated at some school of medicine, either of the United States or some foreign country, or who cannot produce a certificate of qualification from some State or County medical society, and is not a person of good moral character, to practice medicine in any of its departments, for reward or compensation, or attempt to practice medicine, or prescribe medicine or medicines, for reward or compensation for any sick person within the State of Ohio; provided, that in all cases when any person has been continuously engaged in the practice of medicine for a period of ten years or more, he shall be considered to have complied with the provisions of this act, and that where persons have been in continuous practice of medicine for five years or more, they shall be allowed two years in which to comply with such provisions.

SEC. 2. Any person living in the State of Ohio, or any person coming into said State, who shall practice medicine, or attempt to practice medicine in any of its departments, or perform or attempt to perform any surgical operation upon any person within the limits of said State, in violation of section one of this act, shall, upon conviction thereof, be fined not less than fifty nor more than one hundred dollars for such offense, and upon conviction of a second

violation of this act, shall, in addition to the above fine, be imprisoned in the county jail of the county in which said offense shall have been committed, for the term of thirty days, and in no case wherein this act shall have been violated shall any person so violating receive a compensation for services rendered; provided, that nothing herein contained shall in any way be construed to apply to any person practicing dentistry.

SEC. 3. This act shall take effect and be in force on and after the 1st day of October, 1868.

DR. GAILLARD AND THE RICHMOND MEDICAL JOURNAL.—By a circular which we have received, we learn that Dr. Gaillard has been elected to the Chair of General Pathology and Pathological Anatomy in the Kentucky School of Medicine, having resigned his position in the Medical College of Virginia. This change takes the doctor to Louisville, with his Journal, which now becomes the *Richmond and Louisville Medical Journal*. A large number of distinguished gentlemen all over the country are announced as associate Editors of the Journal. We congratulate Louisville on this valuable accession, and Kentucky that it now has one of the best edited Medical Monthlies in the country, and wish Dr. Gaillard abundant success in his new field of labor.

ARMY CLOTHING.—We have received from the Surgeon General's office a report upon the clothing and uniform of the soldiers of the United States Army. All the details of uniform and clothing appear to have received a very thorough revision, and we think the modification, so far as we have taken time for their examination are wonderfully better both for the comfort of the soldier and his hygiene. The coat is made to assume more of the semi-blouse; the hat is an easy soft felt, made to turn up or slouch, according to service and weather; the villainous leather stock is thrown aside; the amount of clothing, its warmth and thickness, is made better to conform to the varied climate of our service. We are sure the medical officers of the army will decidedly approve these changes, and the men will undoubtedly receive them gratefully.

DISSECTION LEGALIZED.—The Legislature of Wisconsin at the instance of Dr. D. C. Davis, of Portage City, has passed a liberal law legalizing dissections.

CREW'S PREPARED SINAPISM.—Mr. Hill, a druggist of this city, has shown us a specimen sheet of this convenient addition to our pharmaceutical resources. It consists of prepared mustard neatly spread on various sizes of wash leather, ready for use by simply dipping in tepid water. It is claimed for these plasters that the strength remains unimpaired indefinitely.

THE KENTUCKY STATE MEDICAL SOCIETY held its thirteenth annual meeting at Danville on the 7th and 8th of May. Several valuable reports and papers were presented, and the Society adjourned to hold its next meeting in Lexington. Dr. Breckenridge, in welcoming the Society to Danville, did not fail to call attention to the fact that the meeting was held very near the office once occupied by Dr. Ephraim McDowell, the original American Ovariotomist.

THE TENNESSEE STATE MEDICAL SOCIETY convened at Nashville in April, ult. Papers were read by Drs. Jones, Madden, Eve and others. Dr. Bowling exhibited an autograph letter of Dr. Benj. Rush of date 1799, together with ticket and diploma of same time. Dr. J. D. Winston, of Nashville, was chosen President for the coming year.

THE MEDICAL SOCIETY OF WEST VIRGINIA met at Grafton on the 1st of April ult. Drs. Hildreth, Bates, Allen, and others, read interesting reports. Dr. H. W. Brock, of Morgantown, was elected President for the ensuing year, and the Society adjourned to meet at Clarksburg on the first Wednesday of January, 1869.

MARRIED.—On Tuesday evening, May 5th, at the residence of, R. M. White, 35 Wesley Avenue, by Rev. Henry Smith, D. D. Dr. Chauncey D. Palmer to M. Addie White.

MARRIED.—On Wednesday, May 13th 1868, at Second Presbyterian Church, by Rev. Mr. Robertson, Larz Anderson, jr., to Emma Mendenhall, daughter of Dr. George Mendenhall.

MARRIED—At the residence of G. W. Frost, Esq., Lebanon, O., May 20th, by the Rev. C. L. Thompson of Cincinnati, George S. Courtright, M. D., of Lithopolis, and M. Cora Stevens, of Lebanon.

DR. LINCOLN GOODALE, who died at Columbus on the 30th ult. properly heads our list, as one of the oldest in years and second

to none in the duration of his residence in Ohio. He was born in Worcester County, Mass., February 25, 1782. His father, Maj. NATHAN GOODALE, an officer of the Revolution, came to Ohio, reaching Marietta in the summer of 1788. He soon removed to Belpre, where he was much troubled by the Indians, and finally captured by them in the Spring of 1794. He died in captivity while on his way to Detroit to be exchanged. The son studied medicine, and began practice at Franklinton in 1805, served as a surgeon in 1812, and settled in Columbus at the close of the war. He soon after engaged in mercantile business, and amassed a large fortune. He was an energetic, intelligent, and useful citizen, benevolent and public-spirited, yet entirely free from ostentation.

DR. JOHN P. BATCHELDER, who died lately in New York, at the age of eighty-two years, was born in Wilton, N. H., studied medicine in the town of Greenfield in the same State, received his medical degree from Harvard University, and was subsequently Professor of Anatomy in Castleton Medical College and in the Berkshire Medical School at Pittsfield, Mass. He has always stood high as a surgical operator. For the last twenty-five years he has resided in New York, where he has been honored with the Presidency of the Academy of Medicine, and of the New York Medical Association. His valuable medical library has been donated to the New York Medical Journal Association.

DIED.—On the morning of the 8th inst., at 7:20 o'clock, of disease of the heart, Louisa, youngest daughter of Dr. Alonzo T. and Susannah D. Keyt, of Walnut Hills.

Reviews and Notices of Books.

Pennsylvania Hospital Reports. Vol. 1, 1868. Philadelphia: Lindsay & Blakiston.

We have several times heretofore announced this volume of Hospital Reports as in course of preparation. The Pennsylvania Hospital was established something more than a century ago,

and now, in the words of the Elder Meigs in his introductory chapter, "At last! and that only upon attaining the ripe age of one hundred and twelve years!"

The volume before us is handsomely gotten up by the publishers, and contains a large amount of interesting matter. The introductory, by Prof. Meigs, is in his happiest vein and contains reminiscences of the physicians and surgeons who have served the hospital, and it alone will amply repay the purchase money. Then we have a lengthy paper on Laceration of the Female Perineum, by Dr. Agnew, illustrated with woodcuts; a paper by Dr. J. F. Meigs; accupressure by Dr. Hewson; a statistical account of all the cases of Amputation performed from 1850 to 1860—228 cases. Dr. Hunt, Dr. DaCosta, Dr. Gerhard, Dr. Levick and others contribute valuable reports, all based upon observations in the Hospital, and several of them beautifully illustrated with photographs and wood-cuts.

We hope the Series will be continued, and that other large American Hospitals will speedily follow this excellent example. The work may be had of Robert Clarke & Co. Price, \$5.

Atlas of Venereal Diseases. By A. Cullerier. Translated by F. J. Bumstead, M. D., etc., etc. Part III.

We have already noticed the appearance of Parts I and II of this magnificent reprint. The present part continues the consideration of the soft chancre or chanchroid, and the indurated or true chancre. There are six colored lithographic plates with a large number of individual figures on each plate. This promises to be the finest work on Syphilis ever published in this country. Price \$3 each part To be completed in five parts.

A Treatise on Therapeutics and Pharmacology of Materia Medica,
By George B. Wood, M. D., Emeritus Prof. of Theory and Practice of Medicine in the University of Pennsylvania, etc., etc. Third Edition. Two Volumes. Philadelphia: J. B. Lippincott & Co. 1868.

Undoubtedly Dr. George B. Wood has established the claim to the first position as a medical writer in this country, and his works are standard authority in Europe. Especially is this true of his systematic treatise on the Theory and Practice of Medicine. No less is his work on *Materia Medica*, a carefully digested and thoroughly complete work in its department; and we are

very glad that the distinguished author has been spared to present us with a new edition so completely bringing up the work to the condition of *Materia Medica* and *Therapeutics* to the present date.

In this present edition we find our author has introduced a large number of new substances, most of which have been treated at considerable length. Among them we notice the *Calabar Bean*, *Bromine*, *Carbolic Acid*, the *Sulphites*, *Coca*, *Gelsemium*, with many others which have sprung into notice, and several of them into decided prominence since the second edition was published. Besides these individual articles we notice some distinct additions to the groups of medicines and agents in our author's classification, as for example, *Disinfectants Antizymotics*.

We have long regarded the classification of Dr. Wood the most convenient for the use of the student, which has ever been adopted or suggested; and certainly his discussion of topics is the most clear of any author we have ever studied. We are very glad therefore that we have this new edition so completely bringing up the subject to the present time. For sale by Robert Clarke & Co.

Business Notices and Acknowledgments.

NEW BOOKS.

Stille—*Therapeutics and Materia Medica*. H. C. Lea.

Cullerier—*Atlas of Venereal Diseases*. H. C. Lea.

Pennsylvania Hospital Reports—Lindsay and Blakiston.

BULLOCK AND CRENSHAW.—These gentlemen have added a number of valuable formula to their list of sugar coated pills and granules. They are also continually prepared to forward fresh vaccine. See their cards in the advertising department. F. E. Suire & Co. are agents in Cincinnati; Brownley & Sloan of Indianapolis.

"DIAMOND DICKENS."—We announce the concluding volumes of this beautiful series. These two volumes contain the shorter stories of Mr. Dickens. "A Tale of two Cities," and "Great Expectations" make up one volume; and the closing volume of this series gives "The Uncommercial Traveller," and additional "Christmas Stories." Many of these Christmas Stories are now for the first time collected in book form, having originally appeared as contributions to periodical literature. In the last volume we have as a pleasant feature, a synopsis of all Mr. Dickens' Stories, with the characters arranged after the order of dramatis personæ. The beautiful series of fourteen volumes has been uniformly sustained in its character of neatness and good taste throughout and completes a handsome and cheap library edition. Each illustrated volume being only \$1.50

MIAMI MEDICAL COLLEGE OF CINCINNATI.

NINTH ANNUAL ANNOUNCEMENT.

The next regular Course of Lectures in this Institution will commence on Monday, October 5th, 1868.

FACULTY :

- GEORGE MENDENHALL, M. D. Obstetrics.
- B. F. RICHARDSON, M. D..... Diseases of Women and Children.
- H. E. FOOTE, M. D..... Anatomy.
- JOHN A. MURPHY, M. D..... Theory and Practice of Medicine.
- W. H. MUSSEY, M. D..... Operative Surgery and Surgical Pathology.
- WM. CLENDENIN, M. D..... Mil. Surgery, Surg. Anat'y & Principles of Sur'y.
- E. WILLIAMS, M. D..... Ophthalmology and Aural Surgery.
- E. B. STEVENS, M. D..... Materia Medica and Therapeutics.
- W. H. TAYLOR, M. D..... Physiology, Pathology and Morbid Anatomy.
- S. A. NORTON, A. M..... Lecturer on Chemistry and Toxicology.
- C. P. JUDKINS, M. D: } Demonstrators of Anatomy.
- W. K. PERRIN, M. D: } Assistant to Chair of Chemistry.
- C. P. DIVAN, M. D Assistant to Chair of Chemistry.

Professor's Tickets, \$60.

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Or E. B. STEVENS, M. D., *Secretary*,

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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No. 7.

Original Communications.

ART. I.—*A Case of Intussusception of the Ilium and Ascending Colon into the Descending Colon.*

BY JAMES C. PEARSON, M. D., Orleans, Indiana.

On the 13th of February, 1868, Mr. S. M. requested me to see his little daughter, aged 7 years, who, he said, had been subject to having a pain in her abdomen for about fifteen or eighteen months, occurring at irregular intervals. These attacks might come on at any time, but were noticed to come more frequently towards evening. The pain was very severe, at times almost insupportable, commencing at the umbilicus and shooting back to the loins, thence through the great splanchnic nerve to the chest and shoulders; would last for a short time only and then cease, the child resuming her plays and apparent good health as though she had not felt the pain. Her mother was in the habit of giving her a few drops of the spirits of turpentine on a little sugar on each accession of the pain, thinking that worms was the cause of the pain, though she had passed but few. On the 25th day of December, 1867, she eat hearty of pies, cakes, candies etc., at night she had a very severe attack of pain, which continued at short and irregular intervals up to the 27th. The pain getting no better, Dr. A. W. Gray was called in to see her, and states that he learned from her parents that some fifteen or eighteen months previously, she commenced to complain of pain in her abdomen, that with this exception her general health had been good, that the pain would come on instantaneously while at play, last her a

minute or two, when it would entirely cease and she would resume her play, apparently as well as ever; these attacks would occur irregularly, sometimes weeks elapsing without a recurrence. Her mother attributed her suffering to worms, and had been in the habit of giving her a few drops of turpentine whenever she would thus complain. On examination I found she was suffering from severe pain in the umbilical region locating the pain immediately around the umbilicus. Her tongue was slightly coated; little or no nausea; pulse a little excited during the exacerbation of the pain; skin cool and pleasant; urine normal; there was slight tympanitis; some little tenderness was manifested on making firm pressure over the abdomen, whilst slight pressure or friction appeared to afford relief. I could gain no information in regard to the character or appearance of the evacuation from the bowels. I learned that during Christmas she had partaken very freely of confectionaries, green fruit, etc.

Diagnosis.—Biliousness complicated with worms. Prescribed

Hydrg. Chl. mite gr. xij.

Pulv. Santonine gr. viiij.

Pulv. Doveri gr. xv.

M.—Ft. Chart. iij. Give one every three hours, to be followed with castor oil and turpentine in four hours after taking the last powder, in the mean time warm fomentations to be applied over the abdomen.

On my next visit, (28th,) I found that the medicine operated but slightly, although the oil, etc., had been repeated. I then ordered an infusion of senna and pink root; was sent for again on the 29th, and found that there had been no operation. She was screaming with the pain in her belly; was very restless, finding ease only by lying with her abdomen across a pillow. The pain was spasmodic with intervals of five or ten minutes between the paroxysms; irritability of the stomach supervened slight emesis occurring of a fluid resembling the infusion of senna, which would give relief to the spasms of the bowels. On making a close examination of the abdomen, I discovered a hardness and tumefaction in the course of the descending colon, reaching to within a short distance of the crest of the ilium. Supposing from the sensation which it communicated to the fingers, that it was owing to the impaction of worms, or hardened faeces, and fearful of further increasing the irritability of the stomach, I discontinued the use of all remedies by the mouth and resorted to the use of the

warm bath and clysters. On my visit on the 30th, I found that there had been no dejections from the bowels, although the clysters had been assiduously used ever since my last visit. The stomach having become quiet, I directed the administration of an anodyne, composed of Tinct. Opium Camph., Tinct. Valerian, Hoffman's Anodyne and Comp. Spts. Lavender; the warm bath to be continued, and also the injections, which were to be increased by adding the spts. of turpentine.

I should have stated before that the pain was of an intermitting character, coming on usually about 3 or 4 o'clock P. M., and continuing with more or less severity until 2 or 3 o'clock A. M. when she would apparently enjoy entire freedom from pain, and remain so until 3 or 4 o'clock P. M., next day, her appetite remaining unimpaired, with little or no thirst. I visited her again at night and found her suffering severely; had passed four lumbricoides with the injections, but still no appearance of fœcal matter. One of the lumbricoides measured from twelve to fourteen inches in length, was proportionately thick. I was informed that when the patient was put into the warm bath, and gentle friction applied to the tumefaction in the side, it would disappear with a crackling sound, but would again reappear on the recurrence of the pain. Directed the treatment to be continued; was sent for again about 4 o'clock on the morning of the 31st, and met in consultation Dr. E. D. Laughlin; administered chloroform internally and directed the continuance of the warm bath and clysters. On my visit in the afternoon I found that the chloroform had made no impression, but that there had been two or three slight alvine dejections of a dark bilious character. Directed the occasional use of the clysters until the bowels should be freely moved, and the continuance of the warm bath. There was little or no abatement or alteration in the character of the pain, or in the general symptoms for the next few days, although the bowels continued to act regularly without the use of clysters, and the friends reported that the discharges were of a perfectly healthy, natural appearance. Observing the marked periodicity of the pain, I was induced to try the effect of quinine, and, as I thought, with marked effect, as the little patient for three or four days after commencing its use was decidedly better, so much so that she was able to be up and about the house, amusing herself with her play, and even went out into the yard, suffering but

little from pain. The friends supposed her to be getting well, and I confess that I thought so too, and discontinued my visits; but after the lapse of a few days, her father reported that she was getting worse, and wished me to send her some more of the quinine powders, which I did, but this time they failed to exert any influence over the pain.

January 8th, 1868, I was again recalled, and revisited her in consultation with Dr. H. Lingle. We found her suffering acutely, the pain of the same character and still located at the umbilicus; the bowels continued to act regularly; discharges healthy; tongue coated but little and moist; appetite good; no febrile excitement; slight tympanitis; and but little pain on pressure over the abdomen. On consultation we agreed to put her thoroughly under the influence of morphine; done so but without any very decided benefit. For some three or four days she would apparently be better and then would be as bad as ever, thus alternating every few days, the bowels acting regularly, with healthy discharges up to the time of the discontinuance of my visits.

Inspection.—The body very much emaciated; lungs and heart healthy; the abdomen full; on opening the peritonium the descending colon was found to be enormously enlarged and full; in like manner the sigmoid flexure, which made a great curve to near the right side of the abdomen; the transverse colon was thrown into transverse folds, and the ilium was found to be pushed into it; the coecum and ascending colon were entirely intruded; that portion of the ilium which was left and the jejunum were moderately distended; the general peritoneum was intensely injected and covered with lymph; and there was general acute peritonitis; the stomach contained a dirty bilious looking fluid, but no feculent matter that could be detected; the duodenum normal; the jejunum and remaining portion of the ilium were not as much distended as we expected to find them; the ilium was partly filled with yellow fluid fæces. On examining the intestines downward, the lower third of the ilium coecum and ascending colon were found pushed into the descending colon, passing very nearly through the sigmoid flexure. On opening the sigmoid flexure the coecum, the termination of the invaginated portion, was observed to be almost black, surrounded by a small quantity of semi-fluid fæces; the cæcum was firm and

tense; the illeo cœcal valve was partly closed by adhesions; the peritonitis was not the result of perforation into the peritoneum, but was set up by direct extension from the strangulated part; the liver, spleen and kidneys were healthy.

The obscure character of the disease in this case made it one of peculiar interest. The long continuance of the pain or colic, extending over a period of eighteen months, the apparent good health of the little sufferer between the paroxysms of pain, the regular and healthy action of the bowels, urine normal in character and quantity, the child appearing to be well in every respect except the irregular returns of the pain or colic. The disease lasted about one year and a half. It is possible that the intussusception continued through that period, being but slight at first and gradually increased to a greater degree. The intestines did not become entirely occluded till within two or three days of the fatal termination. Her relief and seeming good health between the paroxysms of the pain or colic, was the result of the partial restoration of the intussusception with the relief of the symptoms, and at each fresh paroxysm pushed further onward.

I could not get to examine this patient satisfactorily; she would not let me manipulate the parts affected. I could see a large coil of intestines in the left illiac region, passing over into the right half of the abdomen, then down behind the pubes; this was more particularly the case when she had a paroxysm of pain, but when she was not suffering so acutely, the coil of intestines did not show so prominently; her tongue coated with a white fur; the pulse was weak and compressible; vomited a considerable quantity of green, bilious fluid; alvine evacuations were natural up to within a day or two of her death; they then consisted of bloody mucus, having no fœcal matter in them.

Treatment.—Ordered a little wine to be given to support her, also gave her tonics and anodynes. She died on the 19th of February, 1868.

ART. II—*Absence of Urethra. Successful Operation.*

EDITORS LANCET AND OBSERVER:—On the 19th of April, 1868, I was called in haste to visit the child of Jacob and C. Perkins: was informed before leaving my office that it was their first child,

a male, three days old; and the difficulty was inability to pass water. On arrival I found the patient tolerably well developed; very weak; bladder greatly distended; genitals well formed and every way natural, except an entire absence of the urethra—no appearance of the meatus.

My brother and partner, Dr. T. H. Daugherty, being from home and no assistance near that I could summon to my aid, with the permission of the relatives, I at once decided to operate. Placing the child on its back in my lap, and having its feet and hands secured by assistants, I took a very narrow bistoury and proceeded to make an incision through the glans penis, tried ineffectually to introduce a very small catheter. I then decided to continue the incision through the body of the penis in the direction of the natural urethra. I proceeded cautiously, stopping at times to try to introduce the catheter. When near the bulbous portion of the urethra but little resistance was offered to the knife. I laid aside the bistoury and succeeded, much to my gratification, in introducing a catheter into the bladder, evacuating its contents. The hemorrhage was inconsiderable; a few times introducing the catheter succeeded in perfecting a cure, and at this writing, (May 20th,) the fond parents have the satisfaction of seeing their first-born without maim or defect, a healthy, hearty child.

If you think this case of sufficient importance to merit a place in your columns please insert, otherwise I am content.

Respectfully,

W. H. DAUGHERTY, M. D.

STONEWALL, KY., May 20th, 1868.

Medical Societies.

Proceedings of Cincinnati Academy of Medicine.

JOHN DAVIS, M. D., PRESIDENT,

J. L. NEILSON, M. D., SECRETARY.

DISCUSSION ON DIPHTHERIA—CONTINUED.

DR. WM. B. DAVIS regretted that Dr. Richardson was not present. He had said on a former evening, that the authorities were unanimous in the opinion that Diphtheria would not recur twice in the same individual, and he had even gone so far

as to challenge the production of any authority that stated it did recur. In support of the statement of the non-recurrence of Diphtheria in the same person no authority has been quoted, although he had merely mentioned the names of Flint, Condie, and West, but at the same time, had not given us their language. In debate it was generally acknowledged that when statements were made, particularly such sweeping and positive enunciations as the gentlemen had put forth, that the *onus probandi* rested upon him who was their author; that he should stand ready to support them with the facts, but the speaker was prepared to show that there was no foundation for any such statements, and that instead of the weight of authority being in favor of the non-recurrence, if they were not silent upon this point, they expressed a decided opposition to the position taken by the gentleman. There were various kinds of evidence which could be received on these disputed points, the positive, presumptive and negative. Thus: systematic writers in speaking of diseases, such as Pneumonia, Dysentery and other maladies, which are well known to recur frequently, say nothing in regard to this characteristic, while they particularly direct attention to the fact of the non-recurrence of such diseases as measles, small-pox, scarlatina, etc. So in regard to Diphtheria, while we find many of the authorities speaking positively of the recurrence of the disease when others are silent upon this point, we may reasonably take it as both presumptive and negative evidence in favor of the malady not exhausting the susceptibility to future attacks by one invasion. The authors who furnished this presumptive evidence were West, Condie, Wood, Watson, Bennett, Aitken, and others. Dr. Flint gives us positive evidence as to the frequent recurrence of Diphtheria in the same person, for on page 910, Second Edition, Practice of Medicine, he says: "The non-identity of these two affections, (Diphtheria and Scarlatina,) is shown * * * * * by the recurrence of Diphtheria in the same person once or frequently in numerous instances and the occurrence of Diphtheria in those who have had Scarlet Fever." Although the gentleman had thought this deliberately expressed opinion must have been a typographical error, he did not himself see by what authority he had put this interpretation upon it.

Again, Tanner, page 329, Fifth London Edition of Practice, has said: "An attack of exanthematous fever, while it confers immu-

nity to a second assault, does not afford any protection against Diphtheria. A person may suffer from the latter more than once, the last seizure being as violent as the first, while moreover relapses are not uncommon." There had been another statement made by the gentleman on the same evening, which had surprised him so much that in thinking it over, he believed he might possibly have been mistaken, but he had had his first impressions confirmed by the reading of the minutes. The Doctor had spoken of the impropriety and uselessness of going back to the "Fathers of Medicine," for our classification of diseases, and had spoken of Bretonneau as though he was one of the ancient authorities and therefore unreliable, saying that even Eberle did not speak of Diphtheria, thereby implying that even that old authority did not recognize Bretonneau as sufficiently modern for his use. Now he did not doubt that Bretonneau had been the younger of the two men and Eberle himself lived, wrote and died before Diphtheria was considered of sufficient importance to have a place in American or English medical literature. It was true Bretonneau wrote during Eberle's life, but his memoirs on Diphtheria, published in 1821, 1825, and 1826, did not excite any interest, either in England or this country, and it was not until 1855, when an epidemic broke out in Bologne, and carried off three hundred and sixty-six persons, the majority of whom were English residents, that the attention of the profession in England and in this country was drawn to the disease. This inattention was caused by the merely local significance of the malady at the time described by Bretonneau, and because it had only appeared sporadically, and had not been epidemic in those countries speaking the English language, and it was not until 1859, that an English translation of Bretonneau's works was made. The disease was in fact now only just coming before the profession. Comparatively little was known of its manifestations in this country, and it was in an attempt to fix the character of the disease, that the profession were, as had been done by the author of this paper, to go back and apply the definition of the disease as given by Bretonneau, to the successive epidemics of sore throat, and to see whether they did not all have so many characteristics in common with the set of symptoms grouped by Bretonneau, under the term Diphtheria, as to entitle them to a classification under that generic name. The paper had been objected to by another member of the Academy, (Dr. Bartholow,) because it was nothing of itself, that it

was merely a "rehash of Bretonneau's views," and that "the author had stated nothing of his own opinions," but "had studiously endeavored to conceal them." Granting this all to be true, he was surprised that the gentleman, who was himself the very "Prince of Compilers," should have objected. But the charges were wholly without foundation, as would be evident to every one who had heard the paper read, for the author had been particular to take issue with Bretonneau on all his postulates. The speaker then presented these postulates and the objections made by the author, *seriatim*. The first is agreed to, except in regard to Croup, which being a proper sthenic disease, could not be included under the head of Diphtheria.

Second Postulate.—That the membranous exudation is present in every case of epidemic sore throat, was also disproved by the history of subsequent epidemics.

Third Postulate.—That diphtheritic exudation is anatomically *sui generis*, that it is never caused by any other presence but Diphtheria, and in regard to this it was shown by the author that a similar exudation sometimes attends Scarlatina.

Fourth Postulate.—That the exudation is a concrete specific poison, just as that of primary syphilis, and incapable of propagation only in the same manner, was shown not to have had a defender from his day to this.

Fifth Postulate.—That ulceration is never present in Diphtheria, was shown not to be supported as the opposed opinion as given by Aretæus, Herren, Becquerel, and others, shows.

Sixth Postulate.—That it was merely a local disease. In opposition to this opinion he had quoted at length the writings of Troussseau, Isambert, and others. And after this thorough discussion of the definition of Bretonneau the author had asserted that epidemic sore throat, with or without pseudo-membranous exudation, was Diphtheria. The paper was of great importance, if for no other reason than that it established the fact that Diphtheria when epidemic affects all forms of throat disease, they partaking of its nature, a fact which showed the importance of recognizing its presence in our treatment. The gentlemen weakened their case when they said that when there is no exudation, the disease cannot be Diphtheria. For why should not the same influence that is exerted by cholera over all diseases of the bowels also hold in regard to the influence of Diphtheria over all throat affections? When Cholera is epidemic all disturbances of

the bowels were ascribed to it, and where we had one case of well-marked cholera, we had a dozen cases of choleric. With equal truth and force could it be claimed that all sore throat is diphtheritic when the disease is prevailing as an epidemic. Those gentlemen who, with epidemic sore throat prevailing, would wait for the exudation of the pellicle before applying their remedies as against Diphtheria, could be only compared to the man who seeing smoke issuing from a building would stand with his arms folded until the flames break forth before he would cry fire. But the author of the paper was not alone in his position and could easily be pardoned for going back and establishing the definition since the majority of systematic writers, since 1869, had done as he did and arrived at the same conclusions. J. Hughes Bennett did not mention the disease in the first three editions of his work, but in the Fourth, page 970, he says: "Diphtheria in commencing is not to be separated from Tonsillitis, or ordinary sore throat, but when it appears in communities or schools, its presence, if a sloughing tendency is manifested, may be suspected." Wood, up to his Sixth edition, considered the disease local, but in Vol. I of that issue, page 508, says: "Diphtheria does not consist essentially of pseudo-Membranous exudation * * * * cases accompanied with the formation of false membrane are not necessarily Diphtheria. During the prevalence of epidemics of this disease, cases of slight febrile angina frequently occur, which we may reasonably ascribe to the same cause as Diphtheria, and consider examples of that affection, in which not a particle of that membrane can be detected, and in which, probably, none whatever exists." On page 518 of the same volume: "That it (Diphtheria,) is not exclusively pseudo-membranous inflammation itself is shown by the occasional, I may say not unfrequent appearance of cases of the disease without it." Aitken's Science and Practice of Medicine, American Reprint of Fourth London Edition, page 538, says as follows: "Dr. Jenner is of the opinion that many inflamed throats when Diphtheria is epidemic, have their origin in the diphtheritic miasm, just as many cases of diarrhoea when Cholera is present, originate in the Cholera miasm, and it is as difficult to say in some cases that inflamed pharynx is not due to mild Diphtheria as it is to say that a serous diarrhoea is not Cholera." Greenhow on Diphtheria also bears testimony in the same manner, page 13: "During epidemics of Cholera and

Diphtheria, diarræa and sore throat are respectively congeners of Cholera and Diphtheria, from which their difference is less one of character than one of degree." On page 94, "Thus, for there is little if any difference between true Diphtheria and the cases of mild sore throat that so often prevail simultaneously with it, and which, as I have already said, probably only differ from it in degree. The two forms pass insensibly into each other, so that cases of every intermediate degree of severity may often be observed in the same epidemic." These quotations were sufficient to establish the probability of the position taken by the author.

He would now give his own experience. As had been said before, Diphtheria prevailed in those places which were common to all epidemics, wherever there is poverty, filth, etc., and in our own city we would find it almost exclusively developed in that section called "over the Rhine," among the crowded German tenement houses. In the winter and spring months where families are shut up in one or two rooms, all the windows closed and the fresh air excluded, while every office of life is performed in the same apartment. He had had his office in that region from 1855 to 1860, and had seen a number of cases of Diphtheria among this population, but since that time, having moved further down into the city he had seen comparatively few cases of the disease. He had thought it had almost disappeared from our midst, but during last winter he had several times been called in consultation with Dr. Fishburn, who has a large practice in that section of our city, in regard to severe cases of Diphtheria, and the doctor complained of the fatality of the type prevailing. In 1855 he had had his first case of Diphtheria in the child of the present Sheriff. There was great prostration; all the typhoid symptoms and a form of pellicle, such as he had not seen in other cases with the exception of two, and in these it was not so thick. It was of a dark, dirty gray color, one-sixteenth of an inch thick, tough, very difficult to detach, and speedily reformed. Again, he had seen the exudation of a creamy and skim-milk appearance, and covering the fauces, tonsils, palate and extending forward over the gums and inner surface of the lips. When paralysis occurred he had seen it as a rule especially affect the muscles of the throat and eye. Mentioned case in point. Was called to a child at night, supposed to have had a convulsion; probably was a severe chill; this was followed by fever; the swelling of the

tonsils, in this case, was extreme and the inflammation went on to gangrene; from the beginning there was difficulty of deglutition and obstruction of respiration; the glands continuing to so increase in size that there was constant regurgitation of swallowed fluids through the nose. Converging strabismus ensued. Under the use of tonics, the child recovered proper eye-sight in a few weeks, but it was at least three months before the voice was regained. In still another case there was such an enormous enlargement of the glands of the neck, that they were on a line with the breast and cheek; the head thrown back; tonsils sloughing: pulse small; patient died. The disease seemed particularly virulent, for it extended to other members of the house and to the neighboring house, where one died. He was himself seriously affected by it, and was compelled to resign practice for some time. Had seen a rheumatic form where there was rheumatic inflammation of one of the knee-joints, with exudations in the throat, and other symptoms of Diphtheria. This rheumatic complication disappeared, as well as the throat trouble, under the treatment directed against Diphtheria. Had seen another case where there was hemorrhage from the bowels, and the most complete relaxation of the system, death ensuing. All these cases with the exception of two, occurred in the northern part of the city; and it was probable that gentlemen, who denied the presence of the disease in our midst, lived and practiced among that class, and in those sections of the city, where the disease rarely or never occurred. In all cases where he met with the pseudo-membranous exudation, he found several members of the same household, or others in the immediate neighborhood, suffering with sore throat without exudation.

Dr. Tate said he was glad the Society had become interested in the subject of Diphtheria. It was well worthy of prolonged discussion. It was a disease that had been heard of all over the continental European States, in Great Britain, Spain, United States, and even in Australia. It was of special interest since it affected most frequently the younger portion of the community, at the most interesting period of life. The disease was of comparatively recent origin, and but little of it was known in this country. The history of the disease was as follows. It is first mentioned by Aretaeus as appearing in Rome in the fourth century; next we hear of it in Holland and Germany in the thirteenth century; in Italy and Spain in the sixteenth and seventeenth centuries after this it appeared in France and Eng-

land, and finally came to America. As it was epidemic in character it had assumed from time to time different types. Among the earliest descriptions was an excellent work by a Spanish authority written in the seventeenth century, and we did not do justice to this early authority, when we deferred so implicitly to Bretonneau. Villa Real wrote a work of two hundred pages on the subject, described it at great length, and with particularity and accuracy. Henara and Mercredo also wrote upon the subject, and in consequence not only did Ferdinand open the Hospitals for dissections, but he prescribed severe penalties against those who would throw any obstacles in the way of obtaining bodies for this purpose. These descriptions agree very much with that given by Bretonneau afterwards, that it was not violently inflammatory, and that it was characterized by membranous exudation, and it was probably this fact that led Bretonneau into the mistake of believing that the constitutional symptoms were caused by the local manifestations. But the type of the disease seemed to have changed in Great Britain and France; for we had overwhelming evidence that it was accompanied from the beginning by high fever. Bequerel speaks of its being ushered in by high fever, and again, we had epidemics where there was profound collapse from the beginning in consequence of corruption of the blood. It appeared, therefore, that the disease varied in type, as do all epidemics, per example: Scarlatina had its mild anginose and malignant varieties, but they all had characteristics in common, and Bretonneau had done the profession great service in showing that presence of the membrane established the identity of all the diphtheritic diseases. There was another thing of special interest in connection with the subject, and that was the fact of the disease having a predilection for certain localities; just as when we hear of the approach of Cholera, we know that it will affect certain cities and overleap others in its direct progress, and that it occupies the same places in its successive returns; and so with Diphtheria, the places which first knew the disease, which are thus historical, may always expect in the prevalence of epidemics to be again and again affected. We had seen Diphtheria here in this city in its membranous form, we might expect sometime to see it in its most malignant aspect. It was now prevailing in the membranous form in the city, as described by Sanderson and West. He had himself seen it follow measles, with œdema of throat, swelling of the glands, exudation on tonsils, again

on the ear and lip; and in all these cases there could be no question as to the nature of the disease. In regard to treatment it varied with the type of the disease. With the primary impression upon the vital fluids, and the early and striking prostration, the treatment was obvious, but when it came in the form accompanied by high fever, the stimulant plan was inadmissible. He did not belong to the class who were ready to cast aside all the teachings of our most eminent men and early writers on medicine. He did not belong to any class of extremists, but was willing to receive light from all. He thought, however, the tendency was to too great stimulation. The better plan was to give nourishing diet, chlorate of potassa, tincture of the chloride of iron, but thought no treatment would be of value in the malignant forms. It was a question why Cincinnati was invariably visited by epidemics? We had an answer in the vapors which arise from the fifteen hundred acres of swamp land in Mill Creek bottom. The mortality in portions of the city swept by the west winds, laden with these exhalations, demonstrated clearly the position which he took and which he had maintained years before. In conclusion he thought every one in the Academy should express his opinions on this important disease.

(*To be Continued.*)

The American Medical Association.—Concluded.

FOURTH DAY—*Friday, May 8th.*—The convention resumed its session this morning at 9 A. M., Dr. Gross in the chair. An invitation to visit Mount Vernon was read and accepted; also, an invitation from Mr. King that he be allowed to take a photograph of the Association, which was accepted, and at 10 o'clock the picture was taken in front of the hall. The following, offered by Mr. Martin, of Massachusetts, was adopted:

It seems proper that this Association should not be without a Committee on a subject so transcendently important as that of Vaccination; therefore,

“ *Resolved*, That a Standing Committee of one be appointed upon the whole subject, to report from time to time on such topics connected with Vaccination as shall, in the estimation of such committee, appear of chief practical interest and importance to the profession.”

Dr. Antisell, of Washington, was appointed as the Committee. The Committee on Nominations made the following supplemental report, which was adopted:

Assistant Secretary—Dr. A. J. Semmes.

Committee of Arrangements—Drs. J. G. Richardson, S. M. Bemis, C. Beard, L. T. Pimm, D. Warren Brickell, S. Chopin, and W. S. Mitchell.

Committee on Medical Education—Drs. J. C. Reeve, Dayton, Ohio; J. S. Hildreth, Chicago; W. C. McCook, Pittsburgh, Pa.; Frank Rice, Memphis, Tenn.; and S. H. Pennington, Newark, New Jersey.

Committee on Necrology—Drs. C. C. Cox, Maryland; E. B. Stevens, Ohio; W. F. Peck, Iowa; H. Van Dusen, Wisconsin; J. M. Toner, District of Columbia; Joseph Simpson, U. S. Army; J. C. Weston, Maine; Henry Bronson, Connecticut; Henry Noble, Illinois; Charles Eversfield, U. S. Navy; T. Parvin, Indiana; J. C. Hupp, West Virginia; Joseph Mauran, Rhode Island; J. M. Keller, Tennessee; H. F. Askew, Delaware; H. J. Clark, Massachusetts; E. M. Moore, John Shady, New York; Charles A. Logan, Kansas; — Stewart, Minnesota; Henry Miller, Kentucky; S. G. Armor, Michigan; John Blane, New Jersey; A. Fleming, Edward Wallace, Pennsylvania; D. Arnold, Georgia; J. S. Wetherly, Alabama; S. L. Welch, Texas; T. M. Logan, California; John W. H. Baker, Iowa; P. A. Stackpole, New Hampshire; L. S. Joynes, Virginia; D. W. Brickell, Louisiana; David Booth, Mississippi.

Committee on Literature—Drs. Ed. Warren, Baltimore; Joseph Jones, Nashville; Ed. Andrews, Chicago; J. J. Woodward, U. S. Army; P. S. Wales, U. S. Navy.

Committee on Climatology—Drs. J. C. Weston, Maine; P. A. Stackpole, New Hampshire; Hy. James, Vermont; Alfred C. Garrett, Massachusetts; C. W. Parsons, Rhode Island; E. K. Hunt, Connecticut; W. F. Thomas, New York; E. M. Hunt, New Jersey, D. F. Condie, Pennsylvania; O. S. Mahon, Maryland; J. Harris, Georgia; George Engleman, Missouri; R. F. Michael, Alabama; T. J. Heard, Texas; R. C. Hammell, Illinois; J. F. Hibberd, Indiana; T. Antisell, District of Columbia; J. O. Hughes, Iowa; Abraham Sager, Michigan; T. L. Neal, Ohio; F. W. Hatch, California; B. W. Avent, Tennessee; E. A. Hildreth, West Virginia; — Owen, Virginia; Samuel Willey, Minnesota;

L. B. Bush, Delaware; G. W. Lawrence, Arkansas; — Compton, Mississippi; Louis T. Pimm, Louisiana.

Committee on Prize Essays—Drs. S. M. Bemis, J. Scott, D. W. Brickell, S. A. Smith, C. Beard, all of New Orleans.

Special Committee on Alcohol and its Relations to Medicine—Drs. John Bell, J. R. W. Dunbar, and Richard S. McSherry.

Committee on Cryptomatic Origin of Disease—with special reference to recent Microscopic investigations on that subject—Dr. Curtis, U. S. Army.

Committee on Diseases of the Cornea—Dr. J. L. Hildreth, of Chicago.

Committee on Excisions of Joints for Injuries—Dr. J. B. Read, of Savannah.

They also reported the following resolution, which was adopted:

Resolved That those gentlemen who desire to report on special subjects, and will pledge themselves to report at the next meeting, be requested to send their names and the subjects they desire to report upon to the Secretary of the Association.

Dr. C. A. Lee, of New York, was appointed a delegate from the Association to the meeting of Superintendents of Hospitals for the Insane.

Professor Henry, of the Smithsonian Institute, was invited to a seat on the platform.

Reports were made from the different sections, which were adopted.

A paper submitted by Dr. Joseph Jones on Albinism in the negro race, was recommended to the Smithsonian Institute for publication.

The thanks of the Association were returned to the Baltimore and Ohio Railroad; Philadelphia, Wilmington and Baltimore Road; Orange and Alexandria, and other Railroads, for facilities shown to the members of the Association.

The thanks of the Association were also tendered to the President of the United States, Speaker Colfax, Chief Justice Chase, Hon. Richard Wallach, Professor Samuel Gardner, Electrician United States Capitol; Dr. Woodward, of the Army Medical Museum; the Committee of Arrangements, of which Dr. Tyler is chairman; and Hon. Edwin D. Morgan, for their politeness and courtesies to the Association. Also to the press of the city for the correct reports of the proceedings.

The President appointed the following gentlemen as delegates

to foreign Medical Societies, Samuel J. Jones, of Chicago; G. C. Blackman, of Cincinnati; Fordyce Barker, of New York; to which committee Dr. Gross, President of the Association was added.

The President read a letter from Hon. George Bancroft, our minister at Berlin, relative to Professor Aaron Bruke, the great microscopist, who is now blind.

On motion, Dr. Gross, the President, was authorized to send a letter on behalf of the American Medical Association, complimentary of Prof. Bruke.

Drs. Howard and Dunbar, of Baltimore, and Dr. C. H. Nichols, of District of Columbia, were appointed a committee on the subject of Marine Hospitals.

Dr. Wetherly, of Alabama, spoke of the next meeting of the Association, and declared that he had no doubt the members would be gladly welcomed and as hospitably entertained in New Orleans as at any place where they had ever met. [Applause.]

Dr. Gross then arose and spoke as follows: "Before the question of final adjournment is put, allow me to tender you my cordial acknowledgments for the kindness and courtesy which you have extended to me as your presiding officer. Gratitude and good taste alike prompt the expression of my feelings. In every thing I did I felt I had your generous support and sympathy; whatever errors may have been committed were errors of the head not of the heart, and are, I am sure, already forgotten by you. I congratulate you upon the manner in which you have conducted your proceedings. It is questionable whether there ever was a deliberative body of such magnitude, in which there was so little discord, or so little said and done of an objectionable character. Harmony, cordial and complete, prevailed from the beginning to the end. There was, indeed, not one word uttered that any one, even the most fastidious, might wish to recall; a circumstance the more surprising when it is recollected that men in the heat of debate often give way to heedless and unguarded expressions calculated to ruffle the feelings and to engender unpleasant reminiscences. We have accomplished not a little work, and above all, we have had an opportunity of reviving friendly feeling, of extending our acquaintance with each other, and of interchanging sentiments in regard to matters of vital importance to our beloved profession. I am sure that every one will say, as he leaves this hall, that it was good for him to have

been here, and that he will return to his home with new resolves, and determined to devote himself more earnestly than ever to the advancement of the glory of his noble calling; that he will strive more than ever to elucidate its great principles, and that abandoning all other pursuits, he will worship medicine as the only goddess of his idolatry. Hoping that no evil may befall you on your homeward journey, and that your families may greet you with messages of peace and glad tidings, I bid you a cordial and affectionate farewell.

The Association then adjourned *sine die*.

About noon the delegates embarked on board the steamer Arrow, and proceeded on an excursion to Mount Vernon. The day was fine, and the arrangements for music, entertainment, etc., perfect.

Appropriate addresses were made by Drs. Sayre and Harris, of New York, Davis, of Illinois, Baldwin, of Alabama, Hooper, of Mass., and Condie, of Philadelphia.

A card of thanks, signed by the delegates, was presented to Mr. Sykes, the proprietor of the steamer, and captain Stackpole.

The excursion returned to Washington about five o'clock.

*Twenty-Third Annual Meeting of the Ohio State Medical Society.—
First Day's Proceedings—Morning Session.*

DELaware, OHIO, June 2nd, 1868.

At 10½ o'clock A. M., the President, Dr. E. B. Stevens, of Cincinnati, called the Society to order and introduced Rev. Mr. Waters, who opened the meeting with prayer.

The President was supported by Vice-Presidents Drs. Landon, Leonard, Noble. The Secretary, Dr. Hall, was present and took his seat.

The President, Dr. Stevens, said before calling the regular business of the morning session, that he trusted the Society would indulge him in a few brief remarks, partly personal, partly suggestive. He repeated his hearty and profound appreciation of the honor conferred by the Society, and as a man could ordinarily expect to enjoy this high position but once in a life time, he hoped he should, as in the past, continue to enjoy the kindly forbearance and indulgence of the Society in these new

duties. He expressed his gratification with the pleasant circumstances under which we are permitted to meet, and believed that we were all animated with the purpose to work for the prosperity of the Society and the profession. He trusted we should regard each other as brethren and never forget in any discussion ever so exciting the courtesies due to brethren. With such purposes and such bearing we shall commend ourselves to the people of this intelligent city, commend our Society and profession. He hoped the Society would be able to devise some measures to call out a wider and deeper interest in our Association throughout the State. We are constantly reminded of the meagre character of our published volumes of transactions, as well as how few, comparatively, of the working part of the profession of the State are co-operating with this Association or contributing to its success.

He queried whether the time of year selected was the best for all the purposes and influences of the Society, and alluded to the fact that the New York State Medical Society convened in January at the State Capitol with a view to exert proper influence upon the law making power.

So, too, the transactions of that State Society are published as State Documents, and thus the onus of expense is removed, and at the same time, instead of the limited edition of a few hundred copies, the last Legislature ordered three thousand five hundred copies to be published, so that whatever of influence and value these have, they reach every county and village of the State.

Another topic he thought might well enlist a share of our thought. It was evidently the intention of the founders of the Society to encourage the formation of local societies, auxiliary to this, as a means of more thorough, complete and compact organization of the entire profession of the State; but it is evident that the State and local Societies do not by any means co-operate as they should, and he hoped this, among other matters of interest, would claim the friendly interest, and, if necessary, legislation of the Society.

Finally he said we cannot fail to recognize the fact that Ohio furnishes a large proportion of the brains that control our great national affairs, and he hoped the time was not far distant when by our energy and fidelity and scientific contributions, Ohio should come to be regarded as furnishing the brains that give character to American Medicine.

Doctor Hyatt, Chairman of the Executive Committee, begs leave to report:

That in compliance with the duty imposed upon them by the By-Laws they have secured for the use of the Society Templar Hall, in which we are now assembled, and a room adjacent for the use of committees.

They have furnished the necessary stationery for the use of the Society.

Have given due notice of time and place of meeting with printed circulars mailed to every member of the Society, and to all other regular physicians whose address could be procured.

Have corresponded with all the principal railroad superintendents of the State, and the following have replied favorably, viz. Cleveland, Columbus & Cincinnati; Springfield Br. C. C. & C. R. R.; Bellefontaine Railway; Cleveland, Zanesville & Cincinnati, and the Sandusky, Mansfield & Newark; and will return members free who have paid full fare going, on presentation of certificate to that effect attested by the Secretary of the Society.

Railroad certificates have been furnished and will be found at the Secretary's desk.

To facilitate the transaction of the business of the Society, they recommend the adoption of the following order:

The Society shall hereafter meet at 9 o'clock A. M., and be opened with prayer; and at the close of the morning session take a recess until 2 o'clock P. M., and adjourn at such time as may suit its convenience.

For the first session the following order is recommended.

1. Report of Committee on Admission.
2. Election of New Members.
3. Report of Officers.

At all subsequent sessions the following order shall be observed after the Society is called to order.

1. Reading the Minutes of preceding session.
2. Report of Committees on Admissions, and Election of New Members.
3. Report of other Standing Committees.
4. Report of Special Committees.
5. Volunteer Papers.
6. Unfinished Business.
7. Miscellaneous Business and Resolutions.
8. Election of Officers, second day at 2 o'clock P. M.

An address will be delivered by F. Merrick, M. D., D. D., Pres-
of O. W. University, on Tuesday evening; and your committee
recommend that the Valedictory of the retiring President be
delivered on Wednesday evening.

All of which is respectfully submitted.

E. H. HYATT,
T. B. WILLIAMS,
C. P. LANDON,
J. B. THOMPSON,

Executive Committee O. S. M. S

Dr. Hyatt also stated that he had written to Bishop Thomson,
of Chicago, asking him to be present and address the Society,
and received the following reply:

CHICAGO, May 2d, 1868.

DEAR SIR: Yours of April 25th was duly received. It will not
comport with my duties to accept your kind invitation. I can-
not decline it, however, without expressing my thanks to you,
and through you to the committee you represent, and my high
estimate of the medical profession. I may add that in no part
of the world (according to my observation,) do the members of
that profession occupy a higher social, moral, and professional posi-
tion than in Ohio. To many of them I am under a debt of grati-
tude which it always affords me a pleasure to acknowledge.

Yours truly,

E. H. HYATT, M. D.

E. THOMPSON.

The President announced the names of Drs. Beverly, Brown,
Hill and Beeman to fill vacancies on Admissions.

The proceedings of last year were read in full and on motion to
approve, Dr. McDermont made the following motion:

Dr. McDermont moved that the preamble and resolutions
reflecting upon the Surgeon-General of Ohio, which were pre-
sented by Dr. J. W. Hamilton, and passed by this Society at
Yellow Springs on the 12th of June, 1867, be expunged from
the records for the following reasons:

Said preamble and resolutions contain serious charges and
reflections against a member of this Society, and their adoption
by the Society upon the *ex parte* statement of Dr. Hamilton, with-
out reference to the Committee on Ethics, and without giving the
accused an opportunity to be heard in his own defense, is an act

of injustice and oppression and a violation of the Constitution and By-Laws of this organization.

Pending which, remarks were made by Drs. McDermont, Reeve and Hamilton. Dr. Leonard moved to refer this whole matter to the Committee on Ethics, which, however, was withdrawn, and on motion of Dr. Kincaid the whole matter was laid upon the table until 2 o'clock this afternoon.

The Committee on Admissions made the following report:

Your Committee on membership have examined the applications and vouchers of the following physicians as new members, and recommend their admission:

A. D. Williams,	Cincinnati
Geo Mitchell.....	Mansfield.
A. Blymeyer	Delaware.
P. A. Willis	Belle Point.
John B. Rice.....	Fremont.
W. J. Conklin.....	Sidney.
J. A. Little.....	Delaware.
A. S. Dunlap.....	Springfield.
H. Besse.....	Delaware.
W. Goldrich.....	Delaware.
W. N. Swander	Lancaster.

P. BEEMAN.
N. S. HILL.
P. F. BEVERLY. } Committee.

The several gentlemen named were on motion duly elected members of the Society. The President announced an invitation from Prof. F. Merrick, President Ohio Wesleyan University:

OHIO WESLEYAN UNIVERSITY, June 2d, 1868.

To the President of the Ohio State Medical Society:

DEAR SIR. Allow me through you to extend a cordial invitation to the members of the Society to visit the University at such time on Wednesday as may best suit their convenience. The public rooms will be open throughout the day, but should the Society prefer to designate some particular hour when they will visit them it will be quite as agreeable to the officers of the University.

Very Respectfully,

F. MERRICK, Pres.

On motion, invitation was accepted, and to-morrow at 8 o'clock named for the time.

The President proceeded to call the Standing Committees.

Dr. Scarf, chairman of the Finance Committee, said he would report as soon as the report of the Treasurer was heard.

Dr. Hall, chairman of the Committee on Publication, said he would be ready to report this afternoon.

Dr. Landon, chairman of the Committee on Medical Ethics, said he was happy to state that no business was before this committee this year.

On the call of the Special Committees by the President, Drs. Thad. A. Reamy, on Puerperal Convulsions, R. L. Sweeney, on Amputations, A. Dunlap, on Ovariotomy, B. B. Leonard, on Obituaries, W. C. Hall, on the Microscope, Isaac Kay, on Cerebro-Spinal Meningitis, severally reported papers ready at the convenience of the Society.

On motion adjourned for recess until 2 o'clock P. M.

AFTERNOON SESSION.

The President, Dr. Stevens, in the chair.

Dr. McDermont, chairman of the Committee on Medical Societies, recommended that the Trumbull County Medical Society be admitted as an auxiliary of this Society, said Association having complied with all the requirements necessary to entitle them to admission. Report adopted.

On motion of Dr. Landon, Dr. Haughton, of Indiana, an honorary member of this Society, was introduced to the Society, who responded in a few well chosen remarks.

The Committee on Admissions made the following additional report:

We recommend the following physicians as members of this Society:

G. A. Doherty.....	Cincinnati.
R. McLaughlin.....	Independence.
A. B. Fuller.....	Loudonville.
H. R. Kelly.....	West Point.
A. N. Ellis.....	Reading.
J. Huston	Oxford.
D. A. Morse.....	Midway, Mad. Co.

P. S. Conner,.....	Cincinnati.
A. E. Westbrook	Ashley.
J. G. McCollough	Beallsville.
A. Neal	Sunberey.

And report the following delegates :

E. L. Moore.....	Clearmont Co. Medical Society.
J. W. Stewart	Montgomery Co. Med. Soc.
H. C. Watterman	Meigs Co. Med. Soc.

P. BEEMAN.
J. C. BROWN.
N. S. HILL.
P. F. BEVERLY.

The hour having arrived for the further consideration of Dr. McDermont's motion, it was announced by the President to be the next thing in order. Pending which, remarks were made by Drs. Hamilton, McDermont and Coons. Vote being taken, the motion to expunge was lost.

Dr. R. L. Sweeney, of Marion, proceeded to read a very interesting report on *Amputations*, which was on motion of Dr. Kincaid, referred to the Publication Committee with instructions to print.

Dr. Leonard, Committee on Obituaries, read his report, which was on motion of Dr. Scarf, referred to the Committee on Publication with instructions to print.

Adjourned until to-morrow.

Second Day's Proceedings.—Morning Session.

The President, Dr. Stevens, in the chair, who introduced Professor McCabe of the O. W. University, who opened the meeting with prayer. The President suggested the propriety of having an Assistant Secretary, whereupon Dr. John N. Beach was elected on motion of Dr. Landon. Drs. J. R. Black, of Newark, and S. S. Scoville, of Lebanon, announced Volunteer Papers on Cerebro-Spinal Meningitis, which they were ready to read at the convenience of the Society.

The Committee on Medical Societies made the following report : The Scioto County Medical Society having applied to be admitted as an auxiliary of this Society, and having complied with all the requirements to entitle them to this connection, the Committee on Medical Societies recommend that the Scioto Co. Medical Society become an auxiliary of this body.

C. McDermont, Chairman Committee.

The Committee on Admissions reported favorably on the application of the following gentlemen : Drs. D. C. Fay, Ostander; T. P. Shields, Watkins; A. H. Hunt, Wayne Co.; W. H. Jones, Cleveland.; Joseph Todd, Wayne Co.; B. A. Shouse, Antioch; D. S. Williams, West Independance.,; E. Moore, Warren; J. M. Lord, Chesterville; A. B. Jones, Portsmouth, O.; H. Williams, Allen Co. Medical Society; C. Berlin, Wapakoneta; A. Boylan, Milford Centre; A. F. Zeigler, Columbus.

On motion of Dr. Reamy, it was

Resolved, That the thanks of this Society are tendered Prof. Merrick for his very interesting address last evening, and that a committee be appointed to wait on Prof. M. and solicit a copy for publication with the transactions. The Chair appointed Drs. Reamy, Williams and Landon said Committee.

An invitation was received and read by the Secretary to visit the Female Seminary. Accepted, and 5 o'clock P. M., named as the time to visit said Institution.

The Committee on Publication reported that three hundred and fifty copies of the Annual Transactions were published at a cost of \$137 25.

W. C. Hall, Chairman Committee.

Report received and referred to the Committee on Finance.

The President stated that he was in the receipt of the following :

CINCINNATI, O., June 2d, 1868.

E. B. Stevens, M. D., President of the Ohio State Medical Society:

SIR : At a meeting of the Cincinnati Academy of Medicine held last evening, I was instructed to address you on the following subject, viz : The injustice of the United States tax laws in one particular : that they tax income derived from personal work, mental or manual, as much precisely as they do receipts arising from invested capital. The income of the man who has no other source of revenue than his work ceases when he becomes incapacitated for labor ; but the sickness or death of the owner of real

estate or business capital does not generally affect in the least the profit resulting from the investment. The family of the first may be left in poverty when he dies, but the death of the other will leave his family as well situated pecuniarily as before. Thereupon this Academy is of the opinion that income derived solely from labor, professional or other kind, should not be taxed as heavily as receipts arising from more fixed sources: and a committee was appointed to consider the expediency of memorializing the proper Congressional Committee upon this subject. The object in writing is simply to suggest that the State Society, if the members will think well of doing so, may also give this matter some consideration.

Very Respectfully,

JOHN DAVIS, M. D.

President of the Cincinnati Academy of Medicine.

On motion, Drs. Corson, Brinkerhoff and Reed were appointed a committee to take this subject into consideration.

The Committee on Finance, respectfully report that they have examined the books and papers of Dr. J. B. Thompson, Treasurer of this Society, and find them correct in every particular, and recommend his report be accepted.

The Committee recommend that an assessment of one dollar be levied upon each resident member to meet the current expenses of the Society.

We have also examined the accounts of the Executive Committee, amounting to thirty-two dollars and thirty-three cents and recommend that an order be drawn on the Treasurer for the amount.

W. S. SCARF,
S. S. SCOVILLE,
N. S. HILL,
W. S. ANDERSON. }
Committee.

Report adopted, after a motion to make the assessment two dollars each had been put and lost.

The report of the Treasurer shows

Receipts.....	\$522 21
Expenditures.....	285 00

Balance in Treasury.....	\$237 21
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Dr. Dunlap read his paper on *Ovariotomy*, which was listened

to with much interest, and on motion of Dr. Reed it was referred

Publication Committee with instructions to print. Dr. Mussey made some remarks on Ovariectomy, giving his experience in operating and other interesting features he had met with in the treatment of this difficulty.

Dr. Hamilton made some general remarks in commendation of Dr. Dunlap's paper, and urged the necessity of co-operation of all surgeons in order to get at the true statistics in the premises.

Dr. Mussey proceeded to read a very interesting report on *Surgery*, and exhibited various ingenious appliances to the Society that he was in the habit of using in fracture of the patella, and on motion, laid on the table until afternoon to be discussed. (The discussion after dinner was not reached.)

AFTERNOON SESSION.

The President, Dr. Stevens, in the chair.

After the transaction of some unimportant business, the Chair announced that the regular order of business was the annual election of Officers. Drs. Kincaid and Steele being appointed tellers, the result was as follows :

A. DUNLAP, Springfield.....	<i>President.</i>
DR. T. B. WILLIAMS, of Delaware.	
DR. T. A. REAMY, of Zanesville.	
DR. H. K. STEELE, of Dayton.	
DR. J. H. HENDERSON, of Newville.	
DR. W. C. HALL, of Fayetteville,	
DR. J. N. BEACH, of West Jefferson.	
DR. J. B. THOMPSON, Columbus.....	<i>Treasurer.</i>

Drs. Doherty, Landon, Black, Thomas and Carey, Committee on Admissions.

The old accounts of Dr. Beach, who had been for some time a non-resident of the State, was, on motion of the Treasurer, Dr. J. B. Thompson, stricken from the books.

Dr. Scarf moved that when this Society adjourn it be to meet at Yellow Springs, June, 1869. The following places were also suggested : Zanesville, Columbus, Gallion and Cleveland. Dr. Kincaid was in favor of settling upon some permanent location for the annual meeting. Dr. Mussey said we had gathered more moss by rolling up to Delaware, than we ever had before, and he believed in rolling. Dr. Thomas believed in rolling also.

Various suggestions were made as to the policy of the Society when finally, the vote being taken, Columbus was selected as the next place of meeting.

Dr. Kay, of Springfield, read a very interesting paper on *Cerebro-Spinal Meningitis*, which was on motion laid on the table until the volunteer papers on the same subject could be read.

Dr. E. H. Hyatt, Chairman of the Executive Committee, made the following additional report: Delegates to the Medical Convention who paid full fare going, will be returned free upon the certificate of the Secretary of the Society on the L. M. C. & X., and H. & D. and W. R. R.

Dr. Thad. A. Reamy read his paper on Puerperal Convulsions, which was listened to with deep interest by the Society, and on motion referred to Publication Committee with instructions to print..

Dr. Pearce, of the Committee on the *Incurably Insane*, read an additional report. The Committee was appointed in 1864, and has been continued from year to year ; the Committee has labored to gather statistics; these statistics show nine hundred and fifty-six incurable insane in eighty-seven counties heard from. In sixty-seven infirmaries there are eight hundred and fifty-six incurably insane confined. The Committee asked to be discharged. Dr. Mussey moved that the report be accepted and adopted, and referred to the Publication Committee with instructions to print, but that the Committee be continued to memorialize the Legislature from year to year, until it shall adopt some provision for the incurably insane, pending which remarks were made by Drs. Mussey, Peck, Smith and Pearce. Motion put and carried.

On motion, the Society took a recess until 7½ o'clock P. M. The evening order was stated by Dr. Landon (in the chair) as:

1. Address of the retiring President, Dr. Stevens, of Cincinnati.
2. Installation of officers elect.
3. The reading of the report of Dr W. C. Hall on the Microscope, and Miscellaneous business.

The Society re-assembled at 8 o'clock P. M., Vice-President Dr.

Landon in the chair. Dr. Steele moved that Dr. R. R. McIlvaine who had been in attendance on the "Medical Congress," that convened in Paris last year be requested to report to the Society, which the Doctor proceeded to do orally, in a happy, humorous, and interesting style.

The Chair announced the next business in order was the installment of officers, and appointed Drs. Carroll and Black to conduct the President elect, Dr. Dunlap, to the chair, who, on being introduced by the President, made a few remarks thanking the Society for the honor conferred, etc.

The retiring President, Dr. E. B. Stevens, was then introduced and delivered his annual address, which for eloquence, force and sound logical reasoning is rarely if ever surpassed. The speaker consumed about fifty minutes in its delivery, and was frequently applauded.

Dr. Hall read his paper on the *Microscope*, which was on motion of Dr. Carroll, referred to the Publication Committee with instructions to print.

Dr. T. A. Reamy presented the following:

DELAWARE, O., June 3, 1868.

President F. Merrick, O. W. U.

DEAR SIR: We hereby transmit you the following resolution, which was unanimously adopted this morning by the Ohio State Medical Association:

Resolved, That the thanks of this Association are tendered President Merrick for his able address delivered before it last evening, and that a committee of three be appointed to solicit a copy of the same for publication with our transactions.

Earnestly hoping that you may comply with this request we are,

Yours truly,

THAD. A. REAMY,
THOS. B. WILLIAMS,
CHAUNCEY LANDON, } Committee.

OHIO WESLEYAN UNIVERSITY, June 4, 1868.

To Drs. Reamy, Williams and Landon.

GENTLEMEN: Your note of yesterday is received. Gratified that my address was at all satisfactory to the Society, I must respectfully decline furnishing a copy for publication in the minutes of the meeting, deeming it undeserving so permanent a form.

Thanking you for the kind terms in which you have communicated the resolutions of the Society,

I am very respectfully yours,

F. MERRICK.

On motion Society adjourned until to-morrow.

Third Day's Proceedings.—Morning Session.

Society met at 8 A. M., Vice-President Dr. T. B. Williams in the chair. (The attendance of members this—the third day—was good.)

On motion of Dr. Reamy; the reading of the minutes was dispensed with.

On motion of Dr. Landon, a new committee was appointed to wait on Prof. Merrick and re-solicit a copy of his address for publication. The chair appointed Drs. Landon, Reamy and Williams such committee.

On motion, Dr. S. S. Scoville was invited to read his paper on *Cerebro-Spinal Meningitis*.

On motion of Dr. Kincaid to refer to Publication Committee with instructions to print, remarks were made by Drs. Kincaid, Scoville, Stilwell, Dunlap, McIlvaine and Mussey. Motion put and carried.

On motion, Dr. Mussey's paper was taken from the table and referred to the Publication Committee with instructions to print.

Dr. Reamy's paper on Puerperal Convulsions was on motion called up and remarks were made by Drs. Ball, Woodward, Hill, Reamy and others and referred to Publication Committee with orders to print.

A vote of thanks to the retiring officers, and to the Presidents of the different Institutions of Delaware, was, on motion of Dr Reed unanimously passed.

Dr. Scoville moved that this Society appoint a permanent committee of three for the purpose of examining medical gentlemen who are prohibited from practice by late laws of the State of Ohio. This was amended giving the President the power, should the necessity arise, to appoint such committee, and as amended, passed. Dr. T. A. Reamy stated that there were two gentlemen present who were not graduates, that would be cut off by the law referred to above, did they not have a certificate of medical capacity from this or some other Society; he further stated that these gen-

gentlemen were present and anxious to be examined; he therefore moved that a committee of three be appointed by the Chair to examine these gentlemen and report at once. Carried. The Chair appointed Drs. Reamy, Ball and Stevens such Committee, who after performing their duties made the following report.

DELAWARE, O., June 5th, 1868.

Members Ohio State Medical Society:

Your Committee appointed to examine undergraduates for Practice of Medicine in this State, under the provisions of the recent law, have examined the following named gentlemen: Jerome Bland, Hanover, Licking County, Ohio, and Hugh Hendrixson, Lewis Centre, Delaware County, Ohio, and unanimously report them as sufficiently qualified, and recommend that a certificate authorizing them to practice be granted.

Respectfully,

T. A. REAMY,
A. BALL,
E. B. STEVENS } Committee.

Report of Committee received and adopted, and the Secretary ordered to issue certificates to the gentlemen named. A vote to reconsider this whole matter was put and lost.

The Secretary presented and read the following:

HAMILTON, Butler Co., O., October 10, 1867.

W. C. Hall, M. D., Secretary Ohio State Medical Society:

SIR: I have been directed by the Butler County Medical Society to forward you the accompanying preambles and resolutions, passed at the last meeting.

I am, respectfully, your most ob't servant,

J. S. MCNEELY, M. D.

Secretary Butler County Medical Society.

WHEREAS, The rules and regulations of the "State Medical Society of Ohio," for the government of auxilliary societies authorize and urge them to "present through their delegates such papers, etc., to the State Society as may be selected, copies of which these delegates are instructed to deposit with the Committee on Publication. And,

WHEREAS, The same rules referred to contain this language: "Auxiliary Societies will, as far as possible, contribute to the furtherance of the objects of the State Medical Society, by selecting from their own archives such original papers, essays, reports and special statistics as they may deem of sufficient value, on any subject connected with medical science." And

WHEREAS, In 1866, the Butler County Medical Society "through her delegates presented an able paper to the State Medical Society upon an important subject of general interest, and its reference to the Publication Committee was refused; and again in 1867 two other papers were referred from this Society according to the rules, one of which was read *under protest*, and not allowed to go to the Publication Committee, and no action whatever taken upon the resolution appended, which was of a general character; and the other paper lay on the table, and no attention given it further than a statement from the Secretary that such a paper was in his possession. And

WHEREAS, *All other* unpublished papers presented to the State Society, from its first meeting until now, whether read previously before the auxiliary societies or not, *without one exception* have been read without objection and printed in the transactions. Therefore,

Resolved, That the action of the "State Medical Society," above referred to, was a repeated violation of its rules and by-laws governing auxiliary societies, without a parallel in its history, and a direct insult to the Butler County Medical Society.

Resolved, That the grossly offensive discrimination shown in the action of the State Society leaves to us no other course, compatible with honor and self-respect, than a peremptory withdrawal from any further connection with the State Association.

Which was, on motion of Dr. Landon, referred to the Committee on Medical Societies.

The Secretary also read communications from Dr. A. Metz, Special Committee on Aural Surgery, and Dr. W. J. Scott, Special Committee on Practice of Medicine, stating that they had reports ready to present to the Society, but were unable to be present on account of circumstances beyond their control, but should the Society see proper they would each furnish a copy of their report to be published with the transactions, which was on motion of Dr. Landon, adopted.

Dr. Gray, Special Committee on Military Surgery, Dr. J. N. Weaver, Special Committee on Hypodermic Medication were on motion, continued.

Dr. E. B. Stevens was, on motion, directed to procure a new diploma plate and diplomas for the members of the Society.

The Chair announced the following:

STANDING COMMITTEES.

Executive Committee—J. W. Hamilton, R. M. Denig, J. B. Thompson, S. M. Smith, N. Gay.

Finance Committee—W. H. Matchett, A. Blymer, W. D. Scarff, J. H. Rogers, S. Loving.

Publication Committee—W. C. Hall, J. B. Thompson, E. B. Stevens, Isaac Kay, N. A. McCracken.

Committee on Ethics—A. Metz, C. P. Landon, E. H. Hyatt, P. S. Connor and A. Ball.

Committee on Medical Societies—G. A. Doherty, R. R. McIlvaine, I. A. Coons, D. B. Leonard.

SPECIAL COMMITTEES.

Medical Jurisprudence—R. M. Denig, Columbus.

Hæmatics—E. H. Hyatt, Delaware.

Ophthalmology—A. D. Williams, Cincinnati.

Military Surgery—N. Gay, Columbus—*Continued*.

Fracture of Femur—I. A. Coons, Middletown.

Clinatology and Diseases of South-East Kansas—P. Berman, Iola. Kansas.

Surgical Applications of Carbolic Acid—P. S. Conner, Cincinnati.

Diseases of Nasal Passages—Geo. Mitchell, Mansfield.

Recent Advances in Pathology—D. A. Morse, Midway.

Scirrus Uterus—A. B. Jones, Portsmouth.

New Anæsthetics—W. J. Conklin, Sidney.

Hypodermic Medication—J. N. Weaver, Wooster—*Continued*.

Typhoid Fever—C. C. Hildreth, Zanesville.

Cerebro-Spinal Meningitis—A. E. Bell, Zanesville.

Diseases of the Eye—W. T. Taliaferro, Cincinnati.

Some Specialities in Medicine—D. H. Brinkerhoff, Willoughby.

Obituaries—E. B. Stevens, Cincinnati.

Delegates to Indiana State Medical Society—Drs. John A. Murphy and John G. Kyle.

Delegates to Kentucky State Medical Society—Drs. W. P. Kineaid and P. S. Conner.

Delegates to American Medical Association—Jos. Helmick, Harrisburg; Z. Guerrin, Westerville; L. Woodruff, Alton; H. K. Steele, Dayton; G. S. Courtright, Lithopolis; C. McDermott, Dayton; A. Dunlap, Springfield; J. C. Reeve, Dayton; W. C. Hall, Fayetteville; G. A. Doherty, Cincinnati; D. Noble, Hillsboro; Chas. Woodward,

Cincinnati; E. M. Buckingham, Springfield; W. H. Mussey, Cincinnati; G. C. Blackman, Cincinnati; Jno. A. Murphy, Cincinnati; C. C. Comegys, Cincinnati; W. W. Dawson, Cincinnati; Thomas Carroll, Cincinnati, B. S. Browne, Bellefontaine; W. J. Conklin, Sidney; W. J. Scarff, Bellefontaine; W. J. Brinkerhoff, Willoughby; K. G. Thomas, Alliance; J. C. Brown, Urbana; W. P. Kincaid, New Richmond; J. G. F. Holstin, Zanesville; C. C. Hildreth, Zanesville; J. R. Black, Newark; H. J. Herrick, Cleveland; C. P. Landon, Westerville; J. N. Wyle, Ripley; E. Pearce, Steubenville; J. P. Combis, Owensville; Dr. Robison, Wooster; A. Carey, Salem; S. S. Scoville, Lebanon; — McLaughlin, Fremont; P. S. Conner, Cincinnati; R. R. McIlvaine, Cincinnati.

Adjourned, to meet at Columbus second Tuesday in June, 1869.

A. DUNLAP, *President.*

W. C. HALL. }
J. N. BEACH. } *Secretaries.*

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

OF NEW OPERATIVE PROCEDURES FOR CATARACT.—
COMPARISONS AND CRITICISMS. BY L. WECKER.

Translated from the *Annales d' Oculistique*.—Tome LIX.—Nos. 3 and 4.

BY WM. F. SMITH., M. D.

*A.—Combined Linear Extraction.**

In combining with the linear extraction the excision of the iris, and in making the incision as far backwards as the attachment of that membrane will permit, M. de Graefe has evidently reached his limit as regards all that can be embraced in the method

* We propose in the future to call all operations for cataract, to which is added the excisions of the Iris, "Combined Operations," to replace the vague and unmeaning expression "Modified Operations." Our preceptor and friend, M. DeGraefe, to whom we have made known this intention, has written to us the following lines: "I myself entirely approve your proposition to substitute the term "modified." for that of "combined," provided that it may be generally adopted. I find that, especially for the French language, it is much better."

To those who may have the intention to call the operation "linear sclerotic

termed *Linear Extraction*. The future alone will decide whether or not this method is destined to become the general procedure in every operation for senile cataract, as its author believes. As a linear incision is impracticable on the eye, the incision called *linear* is really a flap of only slight elevation. Consequently the only thing truly original in the section of Graefe is in this—that in executing it with a very narrow instrument, and by inclining the cutting edge in various directions, the internal and external, wounds can be made to fall in different meridians of the globe, a maneuver which cannot be accomplished with a lance shaped knife or with an ordinary cataract knife. In the wood-cut (Fig. 1,)

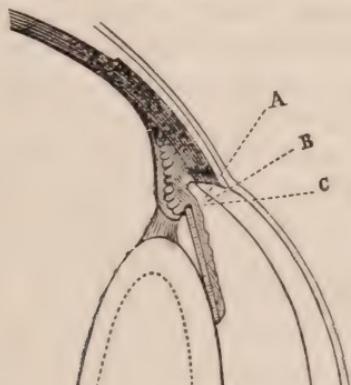


FIG. 1.

it is seen that the incision A, (incision of Graefe,) of which the external lip is found entirely in the sclerotic, has a tendency directly through the coats of the eye, in such a manner that the external and internal openings are in one and the same plane, parallel to the horizontal meridian of the eye; and that the section B, (Arlt,) and C, (Critchett,) are in the same proportion directed more and more forwards. The advantages and disadvantages plainly appear in an examination of Fig. 1.

The easy exit of the lens is much assisted at the moment the incision is made, as it is in those incisions which are executed with

extraction," we mention the following words from *Extraits du Compte rendu du Congrès internationale de 1867*, p. 191. " If the name scleral extraction takes the ascendancy it should not be forgotten by those who make the wound as close to the periphery as possible, that the term contains an inexactitude. Analyze anatomically the incision that you make and you will find that the interior wound in a great part of its extent, and with it a good part of the canal of the wound is buried in the tissue of the cornea. The wound will bear the name in much the same manner if it falls in the sclerotic, if you follow the practice of M. Critchett and others of like opinions."

L. W.

a lance shaped knife, having a lengthened canal, and having the external and internal lips superimposed; but the vitreous body is much less surely protected when no more of the internal lip of the wound exists, and as the incision traverses the sclerotic directly from behind forwards.* It was at that epoch when the perfecting of the linear extraction was followed with so much zeal by my English confreres, that M. Jacobson published his remarkable observations on the combined flap extraction; insisting on the very great advantages of a *sclerotic* incision, compared with the incisions practiced up to that time in the *cornea*. The desire to escape the inconveniences of a large pupil made below, to make useful the incontestable advantages of an incision, such as that which Jacobson indicated, and to profit by the perfections pertaining to the linear extraction as practiced by MM. Critchett and Bowman, caused de Graefe to conceive the idea of the combined linear extraction. We will not enter here into the details of the operative procedure, which we regard as very well understood. We shall speak only of some of the tolerably frequent accidents which may present themselves during its application, and in particular the prolapsus of the vitreous humor. M. de Graefe himself admits that he had, in the first series of his operations, one loss of the vitreous in eight cases. A similar accident happened with M. Arlt, once in seven cases. In our own practice (in the first thirty operations,) one time in six, and in the cases of M. Knapp, once in four. At present M. de Graefe affirms that he has a loss of the vitreous, only once in twenty-five operations. It is to be hoped that those who perform this operation very often, may have the happiness to report the same figures. The loss of the vitreous may occur before the expulsion of the crystalline, when it constitutes a very annoying accident; generally it happens during a badly directed movement of the cystotome. We advise, in the event of this accident, not to have recourse to the blunt hook of M. de Graefe to bring out the lens, since the management of this instrument requires a degree of dex-

* Those of the school of Vienna execute an incision in such a manner that the summit of the small flap coincides with a point on the periphery of the cornea and consequently the external incision runs into the sclerotic. On the contrary, the external incision of Graefe falls *completely* in the sclerotic, seeing that it gives to the plane of the knife a direction towards the center of the ideal sphere of the cornea. An incision exactly opposite to this is that of Critchett, which turns the knife directly forwards so that the wound falls entirely in the cornea.

terity rarely acquired; but to introduce immediately behind the crystalline the flat scoop of Critchett, or in the absence of this, the india-rubber scoop, and to make the extraction of the cataract at once.

A prolapsus of the vitreous which takes place immediately after the exit of the lens is certainly less important, but it renders impossible the evacuation of cortical masses, for the number of cases where one might be able, following the directions of M. de Graefe, to collect by slight maneuvers of pressure, the cortical masses into the pupillary field and causes their evacuation along with a small quantity of vitreous, will be certainly much limited. The frequency of the accident of which we speak will be explained by a glance at Fig. 1, which represents the position of the incisions of Graefe, Arlt, and Critchett, and an examination of the wood-cut (Fig. 2) which indicates the position of the crystal-

line after the escape of the aqueous humor. In calculating the diameters of the cornea and crystalline, it is seen that the latter being exactly in connection with the posterior surface of the cornea, and not having undergone any displacement, is so situated that the interior line of incision becomes, in the most favorable cases, tangent to its superior edge.

If the incision has been executed peripherically (de Graefe, Knapp,) it would also remain at a distance evidently very small above the superior border of the lens. The iris being therefore excised it is the *zone of Zinn*, which, during the opening of the capsule, and up to the moment when the equator of the lens is engaged in the incision, alone supports the pressure and retains the vitreous body. It is therefore owing to the slight tendency of the wound to open spontaneously, and the exact coaptation of its edges as soon as the abnormal pressure ceases that the escape of the vit-

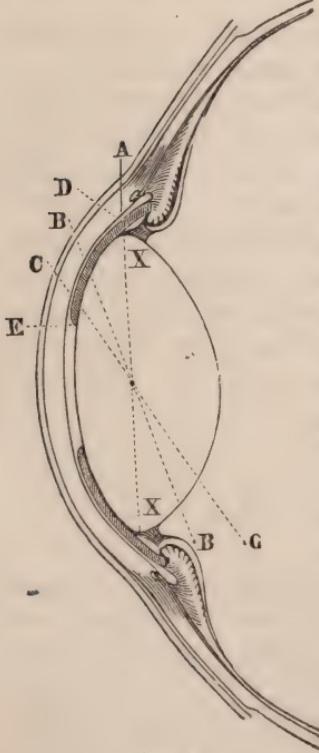


FIG. 2.

r eous does not more commonly occur.

Here these reflections compel us anew to insist on the necessity there is to follow *to the letter* the different steps of the operation

and especially that of the expulsion of the lens, if it is desired to attain statistics as favorable as those of M. de Graefe. Fig. 2 represents a section of the eye after the evacuation of the aqueous humor. This cut was given in the first edition of my work, in order to demonstrate the advantages relatively to the exit of the lens, of a peripheral incision with a flap. At the same time I insisted on the dimensions of the wound with regard to its position and to the diameter of the cataract; measurements which M. Steffane * has lately published, but without making mention of our prior essay. The cut which gives so exactly the position of the crystalline after the escape of the aqueous humor when it has made no movement of displacement shows plainly the facility of a prolapsus of the vitreous body. It is true that one part of the unfavorable chances is removed, since immediately after the incision, the equator of the lens is carried toward the opening made in the eye.

As regards the sequelæ of the operation, we can say without contradiction, that that which has contributed more than anything else to the general adoption and success of the procedure, is the wonderful facility with which those eyes heal from which the expulsion of the lens has been easy, and where all the steps of the operation have been regularly followed.

But, on the other hand, whilst the combined procedure of M. Jacobson has caused cases of *purulent irido-choroiditis* with complete phthisis of the eye to disappear almost entirely from the statistics, this accident is observed notwithstanding ; though, it is true, within restricted limits after the operation of M. DeGraefe, †

* *Erfahrungen und Studien über Staaroperationem*, 1867, p. 18

† We have during the last three years operated by the combined procedure of Jacobson on a number of cataract cases slightly exceeding two hundred. We have had only two circumscribed suppurations of the flap, of which one patient lost the vision completely, and to the other sufficient vision was preserved to enable the patient to go about alone. The number of our operations by the procedure of Graefe has not yet reached fifty, and we already have had already the disappointment to observe two cases of purulent irido-choroiditis, with complete phthisis of the eye. In one of the cases there existed, it is true, an adherent cataract, and the patient a spinster of seventy-six years, was in miserable health. But the operation was performed without the least accident the pupil was completely black, and the trial for vision promised an excellent result ; this, how-

Thus, just as the healing process is generally affected with very great facility; in like manner accidents show themselves very promptly. It is rare that we still have accidents to fear after the third day has passed. Among these accidents occurring late and rarely we mention first of all hemorrhages in the anterior chamber, which may be repeated at greater or less intervals. The most frequent accidents, after combined linear extraction, consists in the development of an iritis, or an irido-choroiditis, which, in the beginning presents the mixed character of the serous and p'astic forms. After the inflammation has existed from six to eight days, the characteristics of the plastic variety become more and more distinct and the clearing of the aqueous humor, as well as the disappearance of deposits on the membrane of Descemet, permits us very soon to judge whether the ordinary result of this inflammation will develop itself or not, that is to say, if a complete pupillary occlusion will supervene, or if we shall have simply to deal with deposits of greater or less dimensions in the field of the pupil, with numerous posterior synechiaæ.

We believe it our duty, here again, to insist on the necessity of not prognosticating too favorably those cases which, having passed the phases of *irido-choroiditis*, are followed by complete closure of the pupil. We thoroughly believe that secondary operations, consisting in the excision of a new portion of the iris, when great care is taken to watch over the patient, give a definite result in only half the cases, viz: sufficient vision to enable the patient to go about. If in the statistics, taking those of M. Arlt, our own, and similar experiences as a basis, we consider half of the cases which have necessitated a secondary operation, as classed among those of complete failures, after a certain length of time, we arrive at the following result: There are from 5 to $5\frac{1}{2}$ per cent. of immediate losses; 10 per cent. which necessitated a secondary operation, including 5 per cent. (in our own experience,) which are finally classed among complete losses. It is seen

ever, did not delay the bad termination, for after twenty-four hours, the eye was the seat of the most violent irido-choroiditis. The other patient, a very robust man, aged sixty-eight, had both eyes operated on at the same time by the procedure of Graefe. From the right eye, the last one operated on, the cortical masses were not entirely evacuated, since the exit of the nucleus was, by reason of extreme pressure of the lids by the patient, followed by the escape of a small quantity of vitreous. Here, also, the trial for vision was very satisfactory, but whilst the healing of the left eye was affected rapidly, in the right very violent purulent irido-choroiditis supervened, and completely destroyed the eye.

that we obtain only 85 per cent. of *immediate* successes, and 90 per cent. of *final* successes.*

Among the accidents which occur during or after the combined linear extraction, we should mention small prolapses of the iris, which take place in the angles of the wound. This accident is, by the avowal of M. DeGraefe, sometimes unavoidable, because, as he says, in spite of all the care that can be exercised to excise the iris well, it is not possible always to avoid the entanglement of that membrane in the angles of the wound, especially in eyes comparatively hard.† When this latter accident takes place in the angles of the wound, there results an incomplete dilatability of the pupil by atropine and retention of cortical masses under that part of the iris, opposite the incision, a condition which predisposes to inflammatory phenomena. But the disagreeable consequences of prolapsus of the iris appear specially during the period of cicatrization, which is prolonged, and leaves the eye for a long time in a very sensitive condition. Besides this, the pupil changes its form after a fashion very unfavorable for distinct vision, because it constitutes an arch, more or less strongly marked in proportion as cicatricial retraction takes place, or as small staphylomas are developed in the angles of the wound. Necessarily the pupil, in being displaced, leaves the central part of the cornea, the part better disposed for vision and is transported to a more peripheral position, which is just as much the less well adapted to distinct vision as its curvature has undergone a change more or less sensible. A considerable degree of astigmatism is the necessary result. We mention, in conclusion, that the efforts at reduction of the iris, by means of Annel's probe, when there is a hernia of this membrane after the operation, are useless and dangerous; and that in the presence of the inconveniences resulting from the confinement of the iris in the wound, it is better to renounce the insignificant advantages of a narrow coloboma, and to excise the iris with particular care, close

* We are happy to see our statistics in accordance with those of our preceptor, M. Arlt, and our friend, M. Critchett, and thus to find ourselves in good company, relatively to the contrast which exists between our figures and those of M. DeGraefe, who obtains 90 per cent. of immediate results; 4 per cent. of immediate losses, and from 2.8 to 6.8 per cent of incomplete results. (*Voy, Klinische Monatsblätter*, (t. VI. p. 17.) It is true, the inquiry arises how it is possible that in the round number of six hundred cases, there can be presented the fractional number of 2.8 per cent. of immediate failures; so much the more, as it is well known that the fraction of semi-successes varies so greatly.

† *Compte rendu du Congrès international d'ophthalmologie*, 1867, p. 99.

to the angles of the wound immediately after the exit of the crystalline, if it is necessary.

B.—*Procedure of Jacobson.*

Those whose duty it shall be in the future to record the history of the extraction of cataract, certainly will unanimously recognize M. Jacobson as the genius, who, during the period of revolution through which modern ophthalmology has passed, contributed more than any one else to the perfection * of extraction. It was he, who by a profound study of the phases of cicatrization, principally insisted on the utility of returning, in the interest of the patient, to the combined extraction, and, as we have said, it was he whose labors led to the conception of the method of *combined linear extraction*. After having performed the operation of Jacobson during three years, we believe ourselves able to testify to its value. The only modifications that we have permitted ourselves to adopt have been the practice of making an iridectomy immediately after the corneal section, and limiting the excision of the iris to a portion not exceeding two to two and a half millimetres.

The difference we make in the dimensions of the excised portion of iris will, perhaps, explain that which also exists between our statistics and those of M. Jacobson. Notwithstanding entanglement of the iris has happened to us very much more often than to the professor of Koenigsburg, our statistics include two hundred and eight cases, from which it is necessary to deduct sixty-six where extraction was practiced without previously opening the capsule. Of these operations we have had 3 per cent. of immediate losses, in 8 per cent. a secondary operation was necessary, which gave to half of them sufficient vision to enable them to go about; this leaves 89 per cent. of immediate successes. There is, therefore, a difference between the immediate results, after the *simple* and after the *combined* extraction, of 9 per cent.

* We are of the opinion of M. DeHasner (*Die neuste Phase der Staaroperation. Prag. 1868,*) that the true progress of an operation for cataract cannot rest in a procedure, which leaves a much greater mutilation than the simple classic operation of Daviel. This reasoning is just, when we place ourselves on the ground of *true surgery*, that is to say, *conservative surgery*. But if we consult the interest of the patient exclusively, which alone should decide us in such cases, it is evident that the combined operation incontestably has the preference as long as it does not appear that a simple operation will give the same results that can be expected from the combined extraction.

Our statistics differ from those of our honorable confrere, M. Jacobson in that we have had to regret much more often than he, consecutive occlusions of the pupil in spite of the iridectomy, an accident of which but little mention is made in the memoirs of M. Jacobson. If, relying on the facts of our personal experience and on that of our most trustworthy confreres, we seek the exact figure of the results of extraction by the simple flap, we determine that of one hundred subjects, ten immediately lose their sight, five remain definitely in a state bordering on blindness, and ten others obtain from secondary operations sight which enables them to help themselves.

We are correct in saying, therefore, that of four persons undergoing extraction by the simple flap, only three immediately recover their sight. We see that the difference between the two procedures is here still more evident, because of one hundred cases, eighty-nine immediately recover their vision by the procedure of Jacobson, whilst only seventy-five do so by the ordinary procedure. And in admitting as a fact, practically verified, that only half of the secondary operations give a result such that the patient is unable to help himself, we see that the combined extraction gives ninety-three definite results to one hundred, in the place of 83.5 given by simple extraction.

[*To be Continued.*]

Perforations in Membranæ Tympani—Artificial Membranes and their Uses.

BY A. D. WILLIAMS, M. D., Cincinnati.

In former articles we have seen how easy and frequently perforations of the Membranæ Tympani take place. As before stated, when they are not too large they will close up entirely. They cannot heal so long as tympanic otorrhœa is present, or the presence of polypi prevents it. These latter fill up the perforations themselves and thus mechanically prevent their healing. It is very desirable to make all perforations in the membrane, so far as possible, close up. In order to do this the tympanic otorrhœa must be relieved, or the aural polypi removed as heretofore directed. If myringitis is the cause of the perforation, that must first be treated till it is relieved. All this being done, the perforations will be placed in the most favorable condition for healing. While fresh, large openings may close, generally, by the time the original disease is cured, their margins have completely

healed over. The mucous membrane from within, and the skin from without, draw together and cover the edges so as to make it impossible for them to granulate and heal. Hence it is that we do not very often see these perforations close spontaneously, and it is still a question whether they can be made to close or not. Some advise the daily application of lunar caustic to the margins so as to make them raw, in order that granulations may spring up. The propriety of this treatment is very doubtful, I have never seen any heal from it. *Traeltsch* thinks, in fact, that he has increased the openings by it rather than made them close. This, I fear, would be too frequently the case.

Others advise the paring of the edges so as to make them fresh. Here again the size of the perforation is increased. Others again advise the repeated incising of the margins of the perforation, and thus hope to make it heal. The Vienna aurists are specially fond of this idea, most likely because they originated it. So far as I know, they have not met with much success thus far.

We must conclude, therefore, that we cannot always, in fact, *very rarely*, make those perforations of the Membranae Tympani close.

Can they be closed by *artificial Membranae Tympani*? It is certainly advisable to close them even *artificially*, if they cannot be made to heal. In large, or even small perforations of the membrane, the mucous membrane of the cavity of the tympanum is constantly exposed to the irritation of the atmosphere, and thus a constant congestion is kept up in the cavitas tympani, and consequently repeated attacks of inflammation are to be expected, which in fact is the case in drums thus exposed. In making a prognosis in such cases, we always tell the patient they need not be surprised if they occasionally have these attacks. On account of the safety of the ear then, it is well to close these perforations artificially. This is done by the artificial drum, and that is one of the objects in view in using it. But the main and great object is to improve the hearing. Sometimes very small perforations will interfere decidedly with the hearing, and at other times quite large ones will have no perceptible effect upon it. The amount of deafness depends, in my judgment, more upon the locality of the perforation than upon its size. But be this as it may, it is true that the *artificial Membranae Tympani* sometimes improves the hearing *wonderfully*, and makes it acuter even than natural, so that ordinary sounds are even painful. As is well known

Toynbee has the credit of introducing the artificial drum to the notice of the profession, although others had used it before he did. Every body knows that his artificial drums are simply a gutta percha disc with a silver wire about an inch in length passed through its center. The object of this wire is to enable the physician or patient to introduce or remove the instrument with perfect ease. The gutta percha disc is less, considerably, than the natural Membrana Tympani. It is introduced by passing the disc, by means of the wire, down the external meatus until it comes in contact with the Membrana Tympani; it is now placed so as to fit over and fill up or cover up the perforation in the membrane. As before remarked, its effect upon the hearing is sometimes wonderful. There is, however, a very serious objection to Toynbee's artificial drums, and that is that they irritate too much, and by their weight press too much on the membrane, and in this way may be painful. The longer they are worn the more trouble they cause, until finally the patient may have to lay them aside entirely. *Traltsch* thinks that wads of cotton are most excellent substitutes for Toynbee's gutta percha drums. In this opinion I agree with him most thoroughly. Everybody has the cotton, it costs a mere trifle, has less weight almost none at all, causes much less irritation and no pain at all, and answers the purpose just as well, and I think even better. After the patient becomes a little accustomed to their use, he can put them in and take them out just about as easy as he can Toynbee's artificial drums. They are made by taking a small quantity of cotton and squeezing it together so as to make it in one way flat, with a circumference of about one-half or two-thirds the size of the natural membrane. It is introduced with a hair-pin, a smooth match, or probe down to the bottom of the external meatus, and fitted nicely over the surface of the membrane. In practice it is found to have the same, if not better, effect upon the hearing, than the gutta percha drums of Toynbee.

I desire to report a case or two in this connection, illustrating the way in which the cotton is to be used.

CASE NO. 1.—Miss T—, Lexington, Ky.; aged 23; apparently perfectly healthy with the exception of her ears. While a girl she suffered intensely with her head and ears. Her physician thought she had typhoid or brain fever. From what I could learn from her I am satisfied that her sickness or suffering all came from acute catarrh of the cavity of the tympana. This

disease simulates sometimes acute intra-cranial inflammation so perfectly that a differential diagnosis is very difficult, when there is nothing about the ears to attract the physician's attention. At all events, when Miss T.—'s ears broke and discharged externally, they ceased to pain her, proving that as soon as the collections in the tympana had broken through the membrane and discharged, the head symptoms being instantly relieved, the disease must have been confined to the tympana. Several years ago she applied to Dr E. Williams for advice on account of a tympanic otorrhœa that had continued more or less severe since her first attack. This yielded to treatment easily, but her hearing remained quite imperfect. A friend told her to put cotton wads into her ears and see if that would not improve her hearing. She tried it, and persevered in the trial, until finally after several days work, she learned to place the cotton in a certain position, where it would improve her hearing so much that it was almost if not quite perfect. Since then she has worn the cotton pellets She syringes them out every evening, and puts fresh ones back with a hair pin in the morning. She cannot get along without them. She cannot hear conversation with any satisfaction at all. Persons have to holla into her ears to make her understand. Without it she can hear a watch about one-half an inch; with it she can hear it about two feet. When she first succeeded in placing the cotton on "*the right spot*," ordinary noises were so loud that they were really painful; she had to avoid them. The rustling of a silk dress was quite unpleasant to her, a thing she had not heard before for many years. Some year and a half since she came to the city to see if she could not get her ears fixed so she could go without the cotton, and if it was safe to continue to wear it. She is now troubled occasionally with attacks of acute inflammation, of one ear especially, during which attacks she suffers severely. These come on mostly during the winter time. She is uneasy for fear these attacks of inflammation will leave her entirely deaf. The last time I examined her the status of her ears were as follows: An elliptical perforation of moderate size near lower margin of membrane in right ear. The mucous membrane considerably red from constant irritation of atmosphere. She could blow through her ear very readily, and there did not seem to be any mucus or pus in the drum as none came out. The membrane of left ear was whole, the perforation having healed. Its shape was irregular, being somewhat cicatrized, and

pressed inwards. Both ears could be easily inflated through the catheter. The ear with the perforation was most improved by the cotton pellet, but the other was decidedly benefitted by it. It was very interesting to observe the position of the cotton when it was "on the right spot." That spot seemed to be about the center of each membrane.

CASE No. 2.—Mrs. B—, Lexington, Ky.; aged 33; has apparently good health. When a little girl, had an attack of acute inflammation of the cavities of the drums. These ruptured the membranes and discharged externally. The otorrhœa continued for a considerable time and ceased spontaneously. A few weeks since she came to the office with her child on account of long standing tympanic otorrhœa. She called attention to her own ears, and upon examination I found that her right membrane had a large perforation in its centre involving nearly one-half of it. In the left ear there had been in all probability a perforation which had healed. Her membrane was extensively cicatrized, and pressed inwards. In her right ear she had been wearing a cotton wad for several years, which made the hearing power quite perfect indeed. With it she could carry on conversation without any special effort. Without it persons had to holla at her before they could make her understand. Without it the watch had to about touch before she could catch the ticking. With it she could hear it about two and a half feet or at an ordinary distance. At first, as in case No. 1, she had to learn to place the cotton "*on the right spot.*" Somebody in her neighborhood first told her to wear it and she worked for several days before she learned to strike the right spot with the cotton. When she did once succeed in this, ordinary sounds became suddenly so loud that they were really painful to her, so that she had to shun for awhile anything like loud sounds. Sometimes she has to move the cotton several times before she gets it to the right place. She uses a hair-pin always to put it in and take it out with. When she had placed it so as to hear best, its position seemed to be about the centre of the perforation, which corresponded with the middle of the Membrana Tympani. In her left ear where there was no perforation, she could not wear the cotton, because it did not benefit her hearing and caused her considerable trouble. She is in the habit of removing and putting in fresh about once in twenty-four hours. In other words, just as often as the cotton gets unclean. It is always moistened and pressed into a lump,

and then introduced. Case No. 1 would always tie a string tightly around the middle of the wad, moisten it and then put it in.

General Remarks.—The size of the wad should not be large enough to fill up the bottom of the meatus; simply large enough to lie loosely on the surface of the Membranæ Tympani. No one can tell where to place them exactly without trying it. The patient must learn this by actual trial. Sometimes it takes several days to get the cotton "on the right spot," as they call it. Many persons would give up in despair before they would have tested it thoroughly. It is only in this way, I repeat again, that we can tell whether an artificial membrane will benefit an ear or not. *How* artificial drums, as they are called, benefit the hearing is difficult to say. Formerly the theory was that they simply closed the perforation in the natural membrane. This, certainly, is not altogether true, as is proven by the improvement in one ear in case No. 1, where there was no perforation. In the other ear it was so extremely marginal that the cotton wad would hardly close it. A more satisfactory explanation may be given in this way. We suppose that the chain of little bones is at some point broken. The weight of the artificial membranes presses the opposite ends together, so as to make them conduct the sonorous vibrations through to the labyrinth, and thus improve the hearing. Where the central portion of membrane is destroyed and in all probability a part of the little bones carried away with it, the artificial membrane may come in direct contact with the end of the stapes and thus communicate the vibrations to the internal ear, as I believe, is the case in the right ear in case No. 2.

- *Trætsch* explains their action upon about the same hypothesis. I have lately advised other persons to try the cotton wads, but have not yet had time to hear from them. One young man told me he was very much benefitted by them, but I have not the particulars and cannot give the case just now. Altogether this subject deserves more attention at the hands of medical men than it has hitherto had. If we can *occasionally* improve the hearing power by a mechanical arrangement it certainly merits a little of our attention.

Correction.—I did not correct the proof sheet of my last article on *Tympanic Otorrhœa*, and by mistake the printer made me say just the opposite of what I intended to say. Near the top of page

295, as it stands reads thus: "The request for a post mortem examination was granted," should read. "was *not* granted." This omission destroys the sense completely and hence I make the correction.

A. D. W.

Correspondence.

Shall We Reject the Fathers?

EDITOR LANCET AND OBSERVER: Among all the annoyances which an intelligent and educated physician has to suffer, there are none more offensive and aggravating than those which emanate directly from his own brethren. The ingratitude of patients, the deprivation of regular habits, the loss of sleep, the reluctant and incompetent compensation he receives, and, to the country practitioner the intolerable roads over which he has to travel night and day, are as nothing when compared with the ignorance, quackery, and charlatanism which he meets at all times and in all places. How often do we see physicians striving to excel each other in catering to the prejudices of the rabble, and pandering to their vile tastes? And how frequently are they found slandering their more studious and successful competitors, condemning their practice as dangerous and unsafe, charging upon them the use of "*villainous minerals*," and making a general onslaught upon some of the most valuable articles of the *Materia Medica*? And what is their pretended motive for all this? for it is all pretense—that some members of the profession have used these articles injudiciously and improperly. We all know that any efficient article of medicine, used carelessly and without due regard to its effects, must produce injury to him who takes it; but is this a valid objection to its proper and judicious use, and shall it be prohibited because some one has prescribed it ignorantly or recklessly? Some of the older members of the profession may recollect an abusive article against the use of calomel, published in most of the political papers of that day, (some twenty years ago,) said to be an extract from a lecture delivered by Dr. Chapman, a professor in the medical school of Philadelphia, and never contradicted, in which he attributes to the use of this drug the horrible and disgusting symptoms which belong

wholly and entirely to a well known disease, and are attributable alone to the poison which produces the disease. Many of our army surgeons will recollect the order of the Surgeon-General prohibiting the use of calomel and tartarized antimony, which was intended to pander to the public taste and to play into the hands of "the gentle craft of Pathies," which it did all over the land. Had he intended it to benefit the soldier in the hospital, would he not have more wisely and sensibly dismissed from the army those reckless and heedless practitioners.

These remarks are called forth by a single paragraph contained in the *American Journal of the Medical Sciences* for April, in the bibliographical notices of new books. The original work I have not seen and have only to do with the paragraph as quoted by the editor at page 477. Can any one carefully read that paragraph and say that Dr. Meigs could not have as effectually recommended his own peculiar views of the treatment of malarial disease and said nothing of the deleterious and poisonous effects of mercurials? To have said he had not found it necessary to use this article in the treatment of his cases would have been satisfactory to his readers, but perhaps this would not have accomplished the object intended.

Dr. Meigs refers to what he calls the "*old American system,*" Now I do not like to see eminent men deprived of the credit to which they may be entitled, or escape any censure they may deserve for the innovations which they introduce into the practice of medicine. This practice belonged eminently to Dr. Benjamin Rush, Professor of Theory and Practice in the Medical School of Philadelphia, then the oldest in the Union and the only one in that city. Introduced by him about the commencement of the present century, it was adopted by a large number of medical men on account of the exalted position which the doctor then occupied, and to which he had attained by his industry, his talents, his single devotion to his profession, and above all by the distinguished benevolence manifested in all his acts. This practice was never adopted by the present writer, for he believed then as now, that Dr. Rush might have crochets as well as others; but he has had extensive opportunities of seeing the practice of others who adopted and carried out all the doctor's views, and he has no hesitation to say that the result of the calomel practice is as successful as that of Dr. Meigs, where he lost six in one hundred and seventy-six. For if, in the early settlement of Ohio,

the mortality in malarial disease had been one in every twenty-nine and one-third cases, the proverbial progress and increase of population in that State would never have been heard of neither in tradition nor in history. Dr. Meigs says that "ten or twenty grain doses of calomel" as a cathartic or in one or two grain doses every two or three hours as cholagogue or alterative, is positively dangerous from the debility which they cause and from the gastric and intestinal irritation, which they sometimes set up;" further, he says, "to say the least they are unnecessary, and any one who has seen the gastric distress, intestinal irritation, or the constitutional poisoning which mercury not unfrequently induces, will be glad to know that he may, with a good conscience dispense with its use in so severe and dangerous a disease as this of malarial fever often is." As I am not one of those who "has seen the gastric distress, intestinal irritation, or the constitutional poisoning which mercury frequently induces," I am not therefore "glad to know" that I may "conscientiously dispense with the use" of this valuable medicine in malarial disease. How often do we see in malarial diseases "gastric distress and intestinal irritation," at the onset of the disease, before any medicine has been taken? And as often as we see it we may relieve it by a prudent and judicious use of calomel. These are not uncommon symptoms at the introduction of any of the forms of malarial disease, and are so frequent that I cannot see why we should attribute them to any other cause than that which produced the disease. It is well known that in all malarial districts during the prevalence of malarial fever the action of the liver becomes perverted, and there is seldom or never a case in which this organ is not implicated. Now if calomel exerts no influence on the liver then I admit it may be dispensed with in the treatment of this class of diseases. My own experience, however, satisfies me that in every case of this disease the exhibition of mercurials greatly promotes the cure; and in epidemic seasons, when the causes of this fever are greatly intensified, I should feel I had not done my duty to my patient should I withhold this indispensable appliance, conscience or no conscience. Not but that disease may be cured without the use of calomel, but, as I conceive, *badly cured*, or in other words, the patient's tenacity of life is more than a match for both the disease and the treatment, for sometimes the patient will recover in spite of the doctor and the disease too. The doctor tells us that "to know that one hundred and seventy-six cases of mala-

rial diseases, many of them very severe in their type, were treated *almost* without mercury, with only six deaths, is surely proof enough that this drug is not essential." I cannot see the propriety of the doctor's conclusion. If he had given *no* mercury, I will then admit that his showing would have some force, but as it is I am left to make my own estimate of the amount given, and am at liberty to put it at any reasonable number of grains I may choose. Now as an offset to this I will state the result of a series of cases which occurred as follows: In the year 1821, five hundred; 1822, four hundred; 1823, four hundred; and 1824, five hundred cases of malarial fever were treated with the loss of only one in one hundred, and in all more or less calomel was given. If a loss of six in one hundred and seventy-six cases, treated without, or almost without mercurials "is proof enough that this drug is not essential," surely the loss of but one in one hundred treated with calomel is conclusive that it is indispensably necessary to insure almost complete success. The doctor apologizes for four of his cases lost, leaving two in one hundred and seventy-six or one in eighty-eight cases, the evidence is still in favor of the calomel treatment, for I offer no apology for the cases I have reported, although a large number of those lost, died in the first paroxysm of appoplectic intermittent, where the coma was so profound that even water could not be swallowed without danger of strangulation. In the last two sentences of the paragraph the doctor reminds me of the farmer's valuable cow. Her excellence consisted in the extravagant amount of milk she gave, but unfortunately she kicked it all over when she was done. He tells us his one hundred and seventy-six cases were treated *almost without mercury*, and in the last sentence he says "it must be plain that mercury *except in small doses*, can be safely dispensed with," and this too after saying that in these doses it is "positively dangerous, and that one may, with a *good conscience*, dispense with its use as not being essential to the cure." Do these last two sentences justify him in his "raw head and bloody bones" tirade against that much slandered and abused article of the *materia medica*, by charging it with procuring "gastric distress, intestinal irritation, and constitutional poisoning?" I have seen patients die from the excessive use of calomel, but in every case from pure debility and exhaustion, without "gastric distress, intestinal irritation or symptoms of constitutional poisoning." I have also seen patients who have recovered perfect health after the excessive administra-

tion of this drug for the cure of malarial diseases, one had one ounce in his stomach, when I was first called to see him. I do not speak of those cases to palliate, excuse or justify the recklessness of this unreasonable system of extravagant medication, but merely to show that mercurials have been outrageously abused and slandered. I would not have devoted the time I have to this paragraph of Dr. Meigs, had I not believed that it with Professor Chapman's phillipic and the Surgeon-General's order was intended "to catch gulls," and to pander to popular prejudice. In conclusion permit me to say I am second to no man in my abhorrence and condemnation of the unjustifiable recklessness we every day see in the use of mercurials, but let the user and not the article used be condemned.

ARETÆUS.

SOUTHERN OHIO, April 20th, 1868.

BOSTON, Mass., June 9, 1868.

EDITOR LANCET AND OBSERVER: The annual meeting of the Massachusetts Medical Society was held at the new operating rooms connected with the Massachusetts General Hospital, on Tuesday and Wednesday of last week. The attendance was large, and a deep interest was apparent in all of the proceedings.

The programme of the first day consisted of the exhibition of patients, surgical visits and operations at the General and City Hospitals, and visitations to the anatomical museums, and the reading of papers upon the following topics: 1. Characteristics of Modern Surgery, by Dr. Hodges. 2. Pathology of Malignant Growths, by Dr. A. Coolidge. 3. Prospective provision for the Insane, by Dr. Earle. 4. Some Improvements in Midwifery, by Dr. Garland. 5. Enucleation of the Eye-ball, by Dr. B. Joy Jeffries. 6. Acne, by Dr. White. 7. Extra Digits, by Dr. Wilder.

These papers were instructive, and were well received by the older members of the profession, who prefer, as a general thing, to be listeners to the younger members, rather than enter the arena for the discussion of the modern theories, and the practical results of medical science at the present hour.

At the annual meeting of the Councillors on Tuesday evening, the reports showed that sixty-six new members had joined the Society during the year, and twelve had deceased; and that the receipts of the Society were for the year \$8,533, and the expenditures \$6,511. The permanent fund of the Society amounts to a little more than \$30,000.

On Wednesday, after the usual business transactions, Dr. J. Baxter Upham read a paper upon the Doings of the Medical Commission to the International Convention at Paris, last year, giving a full abstract of the report of the Commission, to which he was a delegate.

Dr. E. Cheverie submitted a paper on the Spinal Column. Dr. Buckminster Brown read a paper upon Orthopedic Surgery, with the exhibition of cast photographs, etc., of cases, and also several patients.

Dr. Cheever, editor-in-chief of the *Boston Medical and Surgical Journal*, exhibited some surgical patients which illustrated the perfection in the art of Surgery at the present day.

Dr. Harlow presented a paper upon the remarkable case of injury of the head that occurred at Cavendish, Vt., some twenty years ago or more. This case is familiar in the annals of Surgery, as the one in which at the time there was so much doubt about the long bar of iron, about one and a quarter inches in diameter, passing transversely through the head, and the recovery of the patient. The doctor, although the patient's friends prepared a coffin for the injured man, persisted in his efforts, and has followed the man in his wanderings, with his "mind's eye," to South America and California, where the man died, between twelve and thirteen years after the injury. By continued efforts, Dr. Harlow obtained the skull of his patient, and has now presented it with the iron bar, to the Warren Museum of the Harvard Medical College. Dr. H. J. Bigelow, in connection with Dr. Jewett of your State, presented a man who had recovered from the effects of a gas-pipe, four feet long, passing through the base of the brain. This case fully illustrates how easily the brain can be "bored," yet they were so interesting and instructive, that the Fellows of the Society could not, by any parliamentary rules, vote them "bores."

The Prize Committee awarded three prizes of one hundred dollars each, "on the part performed by nature and time in the cure of diseases," to the following gentlemen whose mottoes were: "A true anouncement of the law of creation, if a man were found worthy to declare it, would carry art up into the kingdom of nature, and destroy its separate and contrasted existence," Dr. R. P. Edes, of Hingham; "Nature dominant, art auxilliary," Dr. J. F. Hibberd, Richmond, Indiana; "Ingenuas didicisse fideliter Emolit mores nusinit artes, esse feros," Dr. John Spare, New Bedford. The donor of the prizes was Dr. Jacob Bigelow.

Dr. H. G. Clark, of this city, pronounced the annual address upon the "desirableness of a more extended study of medical jurisprudence, and why its study should be more closely connected with sanitary jurisprudence."

The annual dinner came off at $2\frac{1}{2}$ o'clock, at the Music Hall where about six hundred members and invited guests exhibited their surgical skill in the use of the knife, and gave powerful illustrations of their dietetic rules by personal examples. Dr. J. N. Borland, the Anniversary Chairman, welcomed the Fellows in an eloquent and appropriate manner, and thus having set the ball in motion, sentiments and responses, interspersed with music, enlivened the passing moments, and made each one feel as he left the scene for his city or rural home, that he had received a new impulse to his social nature, and the weight of his professional responsibilities had been substantially lightened. Did space permit, I would gladly give you some of the leading speeches of the occasion.

The annual session of the Association of Medical Superintendents of American Institutions for the Insane, held its twenty-second annual meeting in this city last week.

Dr. Thomas S. Kirkbride presided, and Dr. John Curwen acted as Secretary, both from Pennsylvania. Nearly all of the Northern States were represented, and one State south of the Potomac, Virginia, by Dr. Stribling, of Staunton.

A large portion of the time was consumed in the consideration of a "general law for determining the legal relations of the insane." After a thorough discussion of the subject, a code of rules for a general law throughout the States was agreed upon. The First Section is as follows :

"Insane persons may be placed in a hospital for the Insane by their legal guardians, or by their relatives and friends, in case they have no guardians, but never without the certificate of one or more responsible physicians, after a personal examination made within one week of the date thereof; and this certificate to be duly acknowledged before some magistrate or judicial officer, who shall certify to the genuineness of the signature and of the respectability of the signer.

The Association received the hospitalities of many of our Institutions, from day to day, and as the members departed, they expressed their united satisfaction at the way and manner in which they had been served, while sojourning at the "*Hub*."

BERLIN, Prussia, May 15th, 1868.

EDITOR LANCET AND OBSERVER:—A twelve days ferry over an unusually peaceful ocean, and a thirty-six hours ride in a continental steam coach has transplanted your friend and former protege from the hurry and bustle of the Queen City of the West in the new world, to the quiet and staid sobriety of one of the centres of art and science in the old. A few days for recovery from that most odious of all incurable diseases, sea sickness, and a little time for self recognition after the radical change in every conception of a country inhabited by civilized beings, which our ideas have undergone, leaves us cognizant of an obligation to the *Lancet and Observer*, which demands fulfillment to-night. The presentation of our introductory letters everywhere procured us a favorable reception, and under the good advice we there received we secured pleasant rooms at about one-half Cincinnati prices, inclusive of coffee served at any directed hour in the morning before leaving for Lectures, "in bed," as they call it. Dinner and supper at a restaurant at any conceivable price, I am almost ashamed to say how little, and this is student life in Berlin.

And while our rooms are being arranged, will you step with us, as the novelists say, Mr. Editor, to the surgical clinic of Dr. B. deLangenbeck, who with Virchow, Graefe, Ferrichs and Martin, form the particular lights in Medicine in this section of the globe. Enter, then, under the guidance of two of our fellow-countrymen, whose assistance on all occasions we must ever gratefully remember, mount the successive flights, and be ushered with us into the operating room of Diffenbach's worthy successor. Here, as everywhere, the surgical department is crowded, many attracted by the fame of the teacher, many by the immense amount of material affording more than a sufficiency for a two hours daily clinic, and many, as usual, to see blood shed.

The general arrangement of the room, every teacher has a separate one, does not differ from our's at home, except that they are scarcely so comfortable. Almost all the Hospital buildings and the city is full of relics of by-gone days, and all the lecture rooms are small, and badly ventilated. The feature of peculiar excellence connected with them is their beautiful grounds, but more of this anon.

Langenbeck is a man of perhaps sixty years, average stature, face of eminently Prussian cast, a perfect cuneiform, benevolent aspect, hair and moustache an iron-gray, slender almost to atten-

uation, slightly stooped, still vigorous and in fine preservation. The clinic is thoroughly practical, but the great number of visitors and assistants most effectually prevent any view of his manipulations, except by the student who is called to the arena. This is a very excellent peculiarity of their mode of instruction. Each student is called in turn to a case, questioned, and made to interrogate and examine thoroughly, witness the operation and is the sole party addressed in all the succeeding remarks. I can best illustrate their character by his disposal of the first case, simple hydrocele. The student is made to state theseveral affections which could produce such a condition, to arrive at a diagnosis by exclusion and to give the treatment. The Professor then expatiates, furnishes many analogous cases, in some of which a differential diagnosis would be difficult, touches on scrotal hernia in all its forms, furnishes an epitome of the history of paracentesis with injections, and proceeds to operate in the usual manner. He takes occasion to state, while the fluid is being drawn, that the common idea of adhesive inflammation following the injection of iodine diluted, is erroneous, as he has demonstrated by several autopsies in deaths from other causes; that it merely alters the secreting surface; that chloroform, on the other hand, is sometimes followed by adhesion of the vaginal surfaces, and so on through the clinic. The price of tickets is considerably higher than with us at home. Each Lecturer charges two Friedrich D'or, about eleven dollars in gold, for either the winter or summer session. These sessions, or semesters as they are pleased to designate them, are two yearly, both by the same lecturer, and considered of nearly equal value. It is not necessary to take all the tickets to hear the lectures. After one passes through the little process familiarly known as "developing the canines," and which Americans learn about as soon as any other sect. he pays only for the lectures in which he desires special instruction and visits occasionally at the other clinics.

Of course everybody hears Virchow at once, and everybody that can, occupies a seat in his clinic. As it is necessary, however, to engage it sometime before the session commences, the best seats two months in advance, and as we arrived a little late in the course, our fortune is to stand during the two hours of his lecture outside of the rail which separates us like Jew and Gentle, but which, nevertheless, would be occupied by many, if it implied an inverted position part of the time, rather than accept the alternative. The circumstances under which I first saw him were so characteristic of the man in many respects that I may be pardoned for detailing them. Sauntering along the Charite grounds in the half abstracted condition which a long journey always produces, our attention was suddenly arrested by a vehicle in full speed dashing along the road. It was one of the ordinary Droochkens with which the city is crowded, and in which it

is possible to ride over the whole place for ten or fifteen cents. The fact that such a lumbering old conveyance, with the driver who is always the purest impersonation of sleepy hollow extant, could be urged into anything faster than a jog trot, was a phenomenon sufficient to dissipate the most apathetic reverie. Arriving at the gate, the solitary occupant arose, jumped from the vehicle while yet in motion, tossed the necessary coin to the driver and disappeared up the path. "Virchow," said our companion, and hastening our step, we secured a position close behind him in the hope that we might be able to unravel something of the mysterious man before us, perhaps from his gait alone, as the old lady deciphered characters from a chirograph.

It must be confessed that we were somewhat disappointed in his appearance. Instead of the commanding or inspiring physique we had anticipated, a small man, with a short, quick, determined step, giving a nervous twitch to his whole body in progression; a face stamped strongly with the national characteristics, but chastened by hard study; a forehead expanded in every direction, with the lines that only deep thought produces; a peculiar glance, such as you have often noticed from eyes accustomed to microscopical research, lending rather a furtive expression, which is perhaps increased by the spectacles which he constantly wears; delivery slow, plain, the purest German, no gingle of rhetoric, no imagery, scarcely a gesture; merely a dictum which the lecturer deposes as law, without being at all dogmatical, and which is law.

There are students here from all quarters of the civilized globe. On my right stands a Swede, on my left, a Russian, in front a Scot, and scattered here and there, as everywhere, the ubiquitous American. The table is covered with specimens prepared by his assistants, all middle aged men, from the resources of the Charity. The stands in front of the seats, at which are seated the fortunate elect, are provided with a miniature railway, along which are trundled the microscopes after they leave the Assistants. Full notes are taken everywhere. The subject this morning is the Corpus Luteum; a black-board and colored crayons are his only illustrations in that line. A recent ovary the demonstration. The yellow body is drawn between the layers, and not upon or beneath, which finally and forever settles that much vexed question for me. This is his first lecture of the day, from 7 to 9 A. M., and I am told that he economizes his voice and strength for the remaining five hours, his usual allowance in Medicine and Politics. If an apology were necessary for the author of modern pathology for indulging at all in politics, it is certainly present in view of the fact that he is an earnest and powerful advocate of the liberal party, in fact, the chief of the opposition to the divine right of kings.

Yours ever,

CAUL.

Editor's Table.

THE OHIO STATE MEDICAL SOCIETY convened at the pleasant city of Delaware, on Tuesday, June 2nd, and its sessions occupied Tuesday, Wednesday and Thursday. Elsewhere will be found the proceedings in full. The meeting was a success. There was the largest number in attendance for many years, and the reports were evidently prepared with much care, and gave evidence of research and observation. Several papers called out considerable discussion and interest; if we have any special criticism it is found in the *length* of some of the reports, which went back to call up the history and literature pertaining to their subjects.

The Society cannot fail to appreciate the courtesy and marked attention extended by the citizens of Delaware, and especially the President and Faculty of the Wesleyan University. A large share of the marked success of the meeting was due to the energy of the Executive Committee, who evidently spared no pains or labor, and we are sure the Society understands this.

The next meeting will be held at Columbus, and from the convenience of access, as well as the character of the reports which will be presented next year, we shall be greatly disappointed if there is not a still increased attendance and interest.

Dr. Danlap, of Springfield, was elected President, and Dr. Hall re-elected Secretary by acclamation.

COLLEGE FEES.—By reference to their circulars, it will appear that both the Miami Medical College of this city and the Medical College of Ohio, have advanced their fees to sixty dollars for the Professor's tickets. This makes the fees at these schools at Columbus, Cleveland and Chicago about the same. This advance is right, except that, by general agreement, all these schools should charge at least one hundred dollars instead of sixty dollars. This would be some compensation for the labor of teaching, and would stimulate the schools to still further exertion for excellence, and more liberal outlays for varied means of demonstration.

THE NEW CINCINNATI HOSPITAL.—We have just made a visit to this magnificent structure now rapidly approaching completion. It will be in external appearance and in internal comfort and convenience certainly the most complete and imposing Hospital in this country. The wards are now being rapidly pushed towards

the finishing touches; the operating and clinical amphitheater begins to assume its appearance of completeness, and the visitor appreciates the fitness of the whole design.

We are assured by the Trustees that the patients will be removed to the new edifice, and everything be in order for clinical instruction and attendance, at the latest, by the first of October.

Great credit is due Drs. Judkins and Quillen especially, as well as the entire Board of Trustees, for their persevering energy in pushing forward the complicated details of this great enterprise, which is destined to add great character to the city, and to the profession.

With an energetic Board of Trustees, as at present, and the full and efficient Staff of attendants, we look forward with a great deal of pride to the future high clinical position of the Cincinnati Hospital, both as one of our most important charitable institutions, and an important means of medical instruction; and we can assure our medical friends that every facility will be afforded for clinical pursuits by the wise and considerate policy of the Trustees.

JEFFERSON MEDICAL COLLEGE AT PHILADELPHIA.—We learn that the vacancy created in this institution by the resignation and retirement of the venerable Prof. Dunglison, has been filled by the appointment of Dr. J. Aitken Meigs, to the Chair of Institutes of Medicine. This is an excellent selection, Dr. Meigs being well known as a man of true worth and devoted to physiological investigations.

THE MONUMENTAL COOKING COLUMN.—There is nothing of more importance to the health as well as the comfort of people, than satisfactory arrangements and appliances for cooking food, and any innovations which will revolutionize the present system of our cooking will do much to correct the chronic dyspepsia that every body complains of, and every doctor is called upon to treat. One of the "Morrison's pills" in this direction of kitchen reform, seems to be presented in the new *cooking column* invented by Mr. Patterson, and manufactured in this city by Mr. Van, on Fourth street, near Main. It consists of a series of close fitting steamers with close vessels inside, above a peculiar steam generator sitting on the stove. It may be heated with the simplest charcoal stove, and is adapted for cooking almost every variety of food, especially all meats which you wish to cook by steam, al-

vegetables, puddings, etc., etc., of which you can cook nearly half a dozen separate dishes at the same time and by the same steam heat. The food prepared in this way is very nice, tender and retaining all its natural juices and aroma, must necessarily be more healthy as food than such as is prepared after the usual old style manner. Our family has experimented with the *column* for some months with great satisfaction.

CREW'S PREPARED SINAPISM, OR SPREAD MUSTARD PLASTER, prepared by B. J. Crew, No. 25 N. Sixth street, Philadelphia. This is a new and reliable article for the sick room. It is ready spread, can be carried when traveling, and always ready for use by dipping into water for two or three minutes; they can be dried after using and used the second or third time. Every practitioner has been disappointed by the inefficient and bungling manner of preparation in which mustard plasters are often applied, will at once appreciate the elegant and clear character of this plaster. We have used it and can speak from experience.

FOUGERA'S PREPARATIONS.—Some time since we copied from a reliable exchange the result of extended experiments made with Fougera's Cod Liver Oil in some of the New York Dispensaries; since then we have used this oil in the dispensary of the Miami Medical College and in private practice with great satisfaction. The addition which Fougera makes of Iodine, Bromine, &c., evidently increases the efficiency of the original oil. We have also received from this house specimens of *sinapisms*, prepared somewhat after the manner of Crew's sinapism, (described elsewhere,) which are exceedingly neat in appearance, and active in the mustard principle.

A NEW MEDICAL JOURNAL.—Moorhead, Bond & Co., of New York, have issued the first number of a quarterly journal to be known as the "*American Journal of Obstetrics.*" It is handsomely gotten up, and the first number has carefully written papers from Drs. Thomas, Jacobi, Storer and Brown, together with abstracts of obstetrical matters, and notices of books. Price, \$3 a year.

THE KENTUCKY STATE MEDICAL SOCIETY.—We have received the volume of transactions of this society just issued. It embraced the proceedings of the meeting for re-organization at Louisville, April 1867, and the Thirteenth Annual Meeting at

Danville, April, 1868; also, we have valuable reports by Drs. S. P. Breckenridge, on Registration; J. D. Jackson, Inoculability and Transmissibility of Tuberculosis; L. P. Yandell, Epidemics; L. P. Yandell, Milk Sickness; a letter from L. P. Yandell, jr., reporting his visit to the International Medical Congress. The Society adjourned to meet at Lexington, April, 1869. The Transactions are printed in the most beautiful style, and the volume is a credit to all concerned.

PRIZES OF THE CONNECTICUT STATE MEDICAL SOCIETY.—The Connecticut State Medical Society offered to the physicians and surgeons of North America the Jewett prize of \$200 for the best essay on—*By what hygienic means may the health of armies be best preserved?*—and the Russell prize of \$200 for the best essay on—*The therapeutic uses and abuses of quinine.*

At a late meeting of the Society, held at New Haven, May 28th, the committee announced that they had unanimously awarded the Jewett prize to the author of the essay bearing the motto “*Haec autem cognosci experimentis;*” and the Russel prize to the author of the essay bearing the motto, “*Quod scripsi, vidi.*” On breaking the seal of the accompanying packets, it was ascertained that both successful essays were written by DR. ROBERTS BARTHOLOW, of Cincinnati, O.

MASSACHUSETTS MEDICAL SOCIETY PRIZES.—Dr. Jacob Bigelow, of Boston, last year authorized this Society to offer a prize of one hundred dollars for the best essay on “The part performed by nature and time in the cure of diseases.” Several meritorious essays were sent in as competitors for this prize, and the Committee decided that three of them were each deserving of a premium. In accordance with this recommendation, the donor authorized three prizes, of one hundred dollars each, to be granted. The successful essayists being DR. JAMES F. HIBBERD, of Richmond, Ind., DR. R. T. EDES, of Hingham, and DR. JNO. SPARE of New Bedford.

THE INDIANA STATE MEDICAL SOCIETY offered a prize last year of one hundred dollars for the best essay on *cerebro-spinal meningitis.* We are pleased to see that our industrious and talented friend, DR. J. R. WEIST, of Richmond, Md., is the successful competitor.

In regard to this matter of prize essays, we are pleased with the suggestion of the *Philadelphia Reporter*, that our young men should exchange the mania of lecturing for that mature scholarship which fits them for competition in prize essays. We are sure that thereby we shall arrive at a polished character of professional attainment which will greatly add to the reputation and usefulness of the profession.

INDIANA STATE MEDICAL SOCIETY.—This body was in session at Indianapolis May 19th and 20th. We learn from the *Western Journal*, that papers were read by Drs. Hibberd, Bobbs, Kersey, Ayres, Sutton, Field, Lomax, Mears, and Parvin.

Among the important business of the Society, we notice that steps have been taken for the establishment of a *State Hospital*, also, an effort is making to secure legislation in favor of a law requiring the registration of births, deaths, and marriages.

Dr. N. Field is elected President for next year; Dr. R. N. Todd, Vice President; Dr. G. V. Woolen, Secretary.

TO CORRESPONDENTS.—We have several valuable papers on file which will appear very soon; also, a letter from Dr. Gill, giving valuable suggestions for European Medical study. Our press of matter this month crowds out our book notices and other editorial matter.

SOME of our readers may wonder why Palmer, of artificial limb celebrity, should append to his name the letters LL. D. The explanation is very simple. In the collegiate tongue those letters stand for "*Leg-um Doctor.*"—[*N. Y. Med. Gaz.*]

Business Notices and Acknowledgments.

NEW BOOKS.

Morgan—Electro-Physiology and Therapeutics. Wm. Wood & Co

Damon—Neuroses of the Skin. J. B. Lippincott & Co.

Wilson—Diseases of the Skin. H. C. Lea.

Chambers—The Indigestions. H. C. Lea.

BILLS.—We have sent out bills for all arrearages to this Journal, and have been unpleasantly surprised to find their extent. In a few instances, our attention has been called to oversights; we shall be glad to make all proper corrections. We hope the sight of the bill will be a sufficient reminder of duty, and that our friends will not wait for any further exhortation on the subject. We need the money; and in remitting, so far as possible, please send P. O. orders; but if this is not convenient, and you send the money, send it quietly and without exhibiting to the Post Master. We don't wish to be suspicious, but nearly all the money we lose through the mails, is carefully mailed in the presence of the Post-Master; all payments which fail of acknowledgement in the next number of the Journal, we desire to be notified.

Foul Play—A Novel.— An exciting story, with this title, has been running through the weekly issues of Ticknor & Fields' of *Every Saturday*. It is now issued in complete form, and will be sought for by very many who dislike reading such novels in detached chapters. For sale by Rob't Clarke, for 75 cts. The *Atlantic Monthly*, *Our Young Folks* and *Every Saturday* are promptly and regularly issued, and are well known as among the most popular Serials of the day.

GODEY'S LADY'S BOOK continues its rank among the oldest and best of its kind in this country. Price, \$3.00

AN ORDER for an artificial leg—PALMER'S—for sale. Inquire at this office.

Obituary.

WHEREAS; The members of the Clermont County, Ohio, Medical Society have learned with the deepest regret of the death of our brother and fellow-member, Dr. Erastus C. Sharp, after a protracted illness. We express here our feelings of sorrow for the sad event on this occasion. Dr. Sharp was successful as a general practitioner of medicine, with which he was identified for about forty-three years, devoted and indefatigable in his labor in the profession, the poor ever found in him a humane and good physician, and society a social and good citizen; one whose whole professional life was exerted to the relief of suffering humanity.

Resolved, That in the death of Dr Sharp this Society has lost a good and much respected member, and the community, in which he lived, a highly esteemed physician.

Resolved, That while we would submit to the will of Him, who maketh darkness his pavilion, we deeply sympathize with the family of the deceased, we tender them our sincere and unaffected condolence in their sad bereavement.

Resolved, That this expression be placed upon the records of this Society, and as a token of our sympathy, a copy of these resolutions be presented to the family of the deceased, and published in the *Lancet and Observer*.

L. T. PEASE,
J. S. COMBS,
J. C. KENNEDY.
Committee.

MIAMI MEDICAL COLLEGE OF CINCINNATI.

NINTH ANNUAL ANNOUNCEMENT.

The next Regular Course of Lectures in this Institution will commence on Monday, October 5th, 1868.

FACULTY :

- GEORGE MENDENHALL, M. D. Obstetrics.
B. F. RICHARDSON, M. D..... Diseases of Women and Children.
H. E. FOOTE, M. D..... Anatomy.
JOHN A. MURPHY, M. D..... Theory and Practice of Medicine.
W. H. MUSSEY, M. D..... Operative Surgery and Surgical Pathology.
WM. CLENDENIN, M. D..... Mil. Surgery, Surg. Anat'y & Principles of Sur'y.
E. WILLIAMS, M. D..... Ophthalmology and Aural Surgery.
E. B. STEVENS, M. D..... Materia Medica and Therapeutics.
W. H. TAYLOR, M. D..... Physiology, Pathology and Morbid Anatomy.
S. A. NORTON, A. M..... Lecturer on Chemistry and Toxicology.
C. P. JUDKINS, M. D. } Demonstrators of Anatomy.
W. K. PERRIN, M. D. } Assistant to Chair of Chemistry.
C. P. DIVAN, M. D Assistant to Chair of Chemistry.

FEES.—Matriculation, \$5; Demonstrator, \$5; Graduation, \$25; Professors' Tickets, \$60.

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GEORGE MENDENHALL, M. D., Dean.
Or E. B. STEVENS, M. D., Secretary.

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The material (which is the purest Trieste Mustard, prepared especially for this purpose, and contains no foreign substance to dilute its strength) is spread evenly by appropriate machinery upon paper in three different sizes, for general family purposes, which may be altered in shape by a knife or pair of scissors to be adapted to any portion of the body, as the throat, temple, or behind the ears. To persons traveling or temporarily sick away from home, requiring such an application, its advantages are apparent, and physicians in the practice among a class who have neither the convenience nor requisite skill to prepare properly a Sinapism, will find this an admirable remedy.

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THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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No. 8.

Original Communications.

ART. I.—*Spectrum Analysis.*

A paper read before the Cincinnati Academy of Medicine, and published by request of the Academy.

BY P. S. CONNER, M. D., Prof. of Chemistry, Medical College of Ohio.

On Feb. 6th, 1672, there was read before the Royal Society of London a paper by Sir Isaac Newton, giving the results of certain experiments made by him in 1666, upon sunlight admitted into a darkened room through a small circular aperture, passed through a glass prism, and thrown upon a white paper screen. The writer reported that there was produced, not a circular but an elongated spectrum, its length being five times its breadth, and from the consideration of this spectrum he was satisfied that white light was not simple but composite in its nature, made up of seven rays of varying refrangibility.

In 1802, Dr. Wollaston, in a communication to the Royal Society respecting the primary colors, mentioned the fact that having admitted the sunlight through a *narrow slit*, (instead of a circular aperture as Newton had done,) he found that the spectrum was crossed by seven dark lines, to which, however, he does not seem to have attached any particular importance.

In 1814, Joseph Von Fraunhofer, an optician of Benedict-beurn, (Bavaria,) using an aperture one-fiftieth of an inch wide, a flint-glass prism, and viewing the spectrum through a telescope, discovered the same dark lines; but instead of seven, as noticed by Wollaston, (of whose discoveries he was ignorant.) he observed no less than five hundred and ninety, the exact position of which he determined and mapped. Of these five hundred and ninety,

eight were so broad and strongly defined that he lettered them A, B, C, D, E, F, G, II.; others less distinct were indicated by small letters, and others again were simply numbered. Of the lines marked by small letters, one, *b*, from its size and distinctness, was entitled to a capital letter, and would have been lettered E, rather than the line that was so lettered, had it not been that this latter line more evenly divided the space between D and F. A B and C were in the red, D in the orange, E near the junction of the yellow and green, F near that of the green and blue, G in the indigo, and II in the violet portion of the spectrum. Fraunhofer later subjected to the same sort of analysis the light reflected from the Moon, Venus and Mars, and that coming to us from the stars Castor, Pollux, Sirius, Capella, Betelgeux, and Procyon, finding the spectra of each of these crossed by dark lines—but he failed to discover any such lines in the spectra of artificial white flames.

In 1822, Sir John Herschel described the spectra of the salts of *potassa*, *soda*, *strontia*, and *copper*, and showed that "the colors communicated to flame by different bases afforded, in many cases, a ready and neat way of detecting extremely minute quantities" of such bases. In 1826, Fox Talbot declared that he did "not hesitate to say that optical analysis could distinguish the minutest portions of *lithium* and *strontium* from each other with as much certainty, if not more, than any other known method." At the same time, as Kirchhoff has shown, Talbot's conclusions were very uncertain, since he confounded the flames of *sulphur* and *sodium*, and even conjectured that the peculiar character of the flames of the several salts examined, might be due, not to the salts themselves but to their water-of-crystallization.

In 1832, Sir David Brewster found that the spectrum of sunlight or the light of a lamp flame passed through *nitrous acid* was crossed by hundreds of dark bands, of deepest color and most sharply defined in the more refrangible part of the spectrum, becoming more and more indistinct toward the less refrangible part, until they became almost imperceptible in the yellow and red. About the same time in examining the solar spectrum, he noticed that nearly two thousand dark lines could be observed, the great majority of which were apparent when the sun was near the horizon, and were produced, as he supposed, by the absorbent action of the earth's atmosphere. In 1835, Wheatstone found that when the electric spark was taken from metallic points, the spectrum of the light presented certain colored lines,

such lines varying with and being dependent upon the metals employed as electrodes, and he thus was able to readily distinguish the metals one from another.

In 1842, Beequerel daguerreotyped the solar spectrum and showed "the Fraunhofer lines," the greater part of such lines belonging to the chemical spectrum outside of the violet rays and invisible to the eye. In the following year, Dr. Draper of New York, called attention to the great variations in the relative visibility of "Fraunhofer's lines," as seen at different times, and also to the fact that the lines in the red seemed to become more visible as the sun approached the horizon, while those in the blue, indigo and violet were most obvious at mid-day. (In 1863, he again stated that both the spectrum and its chemical action varied with the hour of the day.) In 1849, M. Foucault announced his discovery of the fact that "a given source of light not only emits rays of definite refrangibility, but also absorbs and extinguishes the same rays." During the succeeding ten years a considerable number of investigators, (among them Stokes, Masson, Miller, Angstrom, Swan and Plucker,) were occupied with the consideration of subjects bearing more or less directly upon the analysis of spectra.

In 1859, Bunsen and Kirchhoff published the results of certain joint investigations, the most important since those of Fraunhofer. On October 20th of that year, Kirchhoff sent a communication to the Berlin Academy on "Fraunhofer's lines." In it he stated that "while in company with Bunsen experimenting on colored flame spectra, he found that the two bright lines noticed by Fraunhofer in the spectrum of a candle flame, as co-incident with the dark lines D of the solar spectrum, could be brought out of much greater intensity by adding *chloride of sodium* to the flame. When the rays of sunlight were passed through a common salt flame, the spectrum, when the sun-light was sufficiently reduced in intensity, showed two *bright* lines at D, instead of the normal *dark* ones. When, however, the sunlight was made more intense, the *dark* lines were much more than ordinarily apparent. The spectrum of the Drummond light contains, as a rule, the two bright *sodium* lines, if the luminous spot of the lime-cylinder has not long been exposed to the white heat—if the cylinder remains long unmoved, these lines become weaker and finally vanish altogether. If they have vanished or only faintly appear, an alcohol-lamp flame, into which salt has been put, and

which is placed between the cylinder and the slit, causes two *dark* lines to show themselves in their stead, which are of remarkable sharpness and fineness, in that respect agreeing with the lines D of the solar spectrum. Thus the lines D of the solar spectrum are artificially evoked in a spectrum in which they are not naturally present. So *chloride of lithium* being brought into the flame of a Bunsen burner, the spectrum shows a very bright, sharply defined line midway between Fraunhofer's B and C lines. Solar rays, of moderate intensity, being passed through the flame onto the slit, the line appears *bright* on a dark ground, but with greater strength of sunlight there appears in its place a *dark* line which has quite the same character as Fraunhofer's lines, and if the flame be taken away, the line entirely disappears." From these various experiments Kirchhoff concluded that "colored flames, in the spectra of which bright, sharp lines present themselves, so weaken rays of the color of these lines, when such rays pass through the flames, that in place of the *bright* lines *dark* ones appear as soon as there is brought behind the flame a source of light of sufficient intensity, in the spectrum of which these lines are otherwise wanting."

The publication of this paper by Kirchhoff marks the commencement of a new era in the history and progress of spectrum analysis. Heretofore there had been many valuable observations made and recorded, many near approaches to the discovery of great principles, yet a spectroscope had been hardly more than: "philosophical toy;" now it became in the hands of various investigators a scientific instrument of great value.

The essential elements of a spectroscope are: 1st. A narrow slit through which the light shall be passed, such light being obtained from the sun, or by the use of the electric lamp, the hydrogen flame, a smokeless gas-burner, or an ordinary alcohol lamp; 2nd. A prism, single or multiple, by passing through which, the ray of light already admitted shall be separated into its several component rays; and lastly, a telescope, by which the produced spectrum shall be sufficiently magnified for purposes of study. In place of using such telescope, the enlarged spectrum may be thrown upon a screen; this is impracticable, however, in many analyses, and, at best, useful only for lecture purposes.

As has already been stated, Fraunhofer, in his investigations, made use of a one-fiftieth inch aperture, a flint-glass prism, and a theodolite telescope. Bunsen and Kirchhoff somewhat modified

the apparatus previously in use, and their form of spectroscope is, at present, generally employed. It has three tubes, the axes of which intersect at the centre of the instrument; at this point of intersection is placed the prism, either simple or compound, made usually of flint-glass, sometimes of thin glass, hollow, and filled with *bisulphide of carbon*; the flint-glass having the better defining power, the bisulphide of carbon the greater dispersive power. Most of Kirchhoff's experiments were made with a compound of four prisms; the Browning spectroscope at Kew has nine. Of course an increase in the number of properly combined prisms increases the length of the spectrum and, consequently, so separates the lines that a distinction can be made between lines apparently coincident when a single prism is employed. Through one of the three tubes of the instrument the light is admitted and passed to the prism. At the outer end of this tube, is a narrow, vertical slit, its width being varied at pleasure by means of a screw. One-half of it may be covered with a rectangular prism, so as to allow light of known character to be passed in for comparison with the light emitted by the substance under examination. Toward the inner end of this tube there is placed, in the focus of parallel rays, a lens, through which the light is transmitted to the prism. A second tube contains near its inner end a lens, and near its outer end a graduated standard scale, the image of which is thrown upon that face of the prism nearest the observer; by means of which scale, the position and size of any discovered lines in the spectrum of the light passed through the first tube can be determined and measured. The third tube is the telescope, for magnifying the spectrum formed by the prism.

The various spectra examined belong to one or other of three great classes. The first embraces those spectra produced by light emitted from an incandescent solid or liquid, such spectra being always continuous, all the rays from red to violet being seen in each, without any crossing lines or bands. To the second class belong those spectra that are produced by "flames and ignited vapors or gases." These are not continuous, but interrupted, presenting one or more bright colored lines or bands. The third class includes those spectra that are formed by the interposition, between the light and a continuous spectrum, of some substance that absorbs a part of the light. Now, as Miller says, "if we put an opaque body we should arrest the whole of the light, but

if we introduce a transparent colored substance, we shall intercept portions of the light." As the result of such interception, the spectra of this third class present certain dark lines or bands interrupting an otherwise continuous spectrum. The spectra of the first class, (the continuous ones,) are of no scientific value, for they tell nothing respecting the nature of the source of their light. A white-hot mass of iron and an incandescent piece of lime, so long as no volatilization takes place, give precisely the same spectrum. (The metal *erbium* gives a spectrum that forms the sole exception to this law, that an incandescent solid or liquid gives a continuous spectrum, for in this erbium spectrum there are found bright lines when the metal is heated, which ought not to be produced before volatilization of the element has taken place.) The second and third classes of spectra, however, do give positive information respecting the nature of the substances experimented upon—hence the value of their analyses.

As Miller says, "there are four principal branches of research, relating to: 1st. *Bright* lines produced by the electric spark taken between different conductors. 2nd. *Bright* lines produced by colored flames, or by the introduction of different substances into flames. 3rd. *Black* lines produced by absorbtion. 4th. *Cosmical* lines, or the *black* lines produced in the light of the sun, the planetary bodies, and the fixed stars."

The spectra given by the electric light taken between different conductors, and those by different substances introduced into flame, are the same for the same substances; each element, or compound undecomposed in the flame, having its own characteristic bright-line spectrum. Either flame or the electric current then may be employed at pleasure, provided that the substance experimented upon, is capable of being volatilized in the flame of a Bunsen burner, or a spirit lamp; these latter flames being easily managed, but affording only a moderate degree of heat. "The hydrogen flame, better than any other, fullfils the two requirements of high heat with feeble illuminating property." When the alcohol flame is employed, the substance to be examined, if soluble in water or alcohol, may be added in solution to the alcohol in the lamp; or whether soluble or not, the substance in powder may be placed upon the wick of the lamp, or introduced in small quantities into the flame itself. "The chlorides, as a class, are the best salts to be used, since they are so readily volatilized. As already noticed, Herschel applied this method as early as

1822, and from time to time examined the spectra of the *chlorides of calcium, strontium, sodium, lithium, copper, the nitrate of copper, and boracic acid*; and it was to this method of analysis that Talbot referred in 1826, when he spoke so positively of our being possessed of a quick and certain method of distinguishing between *lithium and strontium*.

A more considerable number of the elements and their compounds can be volatilized in the flame of the Bunsen burner; the substance examined being introduced into the flame upon platinum wire. If the electric lamp be used, the induced current of the Ruhmkorff coil is discharged from points made of the substance under examination, when such substance is a good conductor; when a non-conductor, good conducting electrodes, as charcoal or lime, are employed, upon which the substance to be examined is placed. The spectrum produced is a compound one, exhibiting the characteristic lines not only of the substance examined but also of the air or gas interposed between the electrodes; hence, when practicable, hydrogen should be so interposed, and in the analysis of non-conductors, there will also be present the spectral lines of the electrodes, exceedingly minute portions of which are volatilized by the intense heat produced by the current.

The spectra characterized by bright colored lines or bands, may, for convenience sake, be subdivided into three classes: 1st. Those produced by the volatilization of solid or liquid elementary bodies. 2nd. By gaseous elements. 3rd. By compounds not decomposed by the volatilizing heat, presenting "spectra peculiar to themselves and independent of other circumstances." For the production of the first class, either the elementary bodies or compounds readily volatilized, may be employed. The compounds of *potassium, sodium, lithium, magnesium, zinc, cadmium, silver, and mercury* are all decomposed and give only the metallic spectra; hence any of the salts of these metals may be used in this method of analysis. The presence of *sodium* is indicated by eight bright yellow lines, so close together as usually to seem but a single line, and even with an ordinary instrument of the better kind, resolved into but two. As Kirchhoff has shown, this sodium line is precisely identical, except in color, with the Fraunhofer line D. So minute a quantity as the 2,500,000th part of a grain will give the characteristic spectral line, and so almost universal is the diffusion of this element,

especially in the form of its chloride, (common salt,) that it is exceedingly difficult to obtain a flame that will not show the yellow line at D. One writer declares that the slightest handling of a platinum wire, upon which any substance is to be introduced into a flame, will detach from the epidermis an amount of chloride of sodium that will be appreciable when the spectrum analysis is made. *Lithium* gives a very brilliant red line and a fainter one of an orange color; and at a very high heat, as was shown by Tyndall, a beautiful blue line is brought out. This metal, formerly thought so rare, the spectroscope has shown to be an element very widely diffused, (though generally in minute quantity,) and one of the constituents of a large number of the vegetable and animal organisms. *Strontium*, also, (which gives an orange colored band, six red bands and a blue one,) has been shown to be more generally distributed than had been supposed. *Magnesium* gives three broad, strong, green lines, very close together and identical with the Fraunhofer line b, and certain others, faint and of little importance. *Iron* is recognized by its over seventy lines, scattered through the entire length of the ordinary spectrum. Four metals giving brilliant and well defined spectra, viz: *cæsium*, *rubidium*, *thallium* and *indium*, are among the fruits of spectrum analysis. The first two, always found associated thus far, were discovered in 1860, by Bunsen and Kirchhoff, while analysing the residue left upon evaporation of the water of the Durkheim Spring, (Bayaria); a ton of the water yielding three grains of the chloride of cæsium, and four grains of the chloride of rubidium. Since their original discovery these elements have been found in other spring waters, in sea water, and in the mineral *lepidolite*. The one-seventy thousandth grain of cæsium, and one-thirty thousandth grain of rubidium will give the characteristic spectral lines. *Thallium* was discovered in March, 1861, by Crookes, and is found in certain varieties of pyrites. *Indium* was discovered in 1863, by Richter and Reich, in the Freiburg zinc ore, a blende in which the zinc is associated with lead, arsenic, iron, chromium, and this new metal indium.

The spectra of gases are much fainter than those given by volatilized solids, and require for their production the electric spark. As shown by Plucker, a gas can be best experimented upon by inclosing it in a glass tube, the central portion of which is capillary; the electric discharge taking place between platinum points, soldered into the ends of the tube. The temperature of the

gas in the narrow part of the tube is sufficiently elevated so that it can give out a light of such brilliancy as to produce a distinct spectrum. The most marked of these gaseous spectra are those of *hydrogen* and *nitrogen*. The *hydrogen* lines are red, and correspond in position with the Fraunhofer lines C F and G, the first two being the strongest and most characteristic. *Nitrogen* gives three different spectra according to the temperature. "When," says Plucker, "the temperature produced by the discharge is comparatively low, incandescent nitrogen emits a golden colored light, resolved by the prism into shaded bands, occupying chiefly the less refrangible part of the spectrum; at a higher temperature the light is blue, and resolved by the prism into channelled bands filling the more refrangible part of the spectrum; at a still higher temperature, the spectrum consists mainly of bright lines, which at the highest attainable temperature begin to expand, so that the spectrum tends to become continuous." This triple spectrum of nitrogen has been by some supposed to indicate that this gas is not an elementary body, but a compound resolved by high heat into its component elements, the various spectra of which are successively brought out; but this theory is probably not a correct one with reference to *nitrogen* any more than to *lithium* or *thallium*, which also give different spectra for different degrees of increased temperature. It is much more probable that the phenomena observed are simply due to an increase in the breadth and rapidity, or at least the rapidity, of the light waves.

The last subdivision of this class of *bright-lined* spectra includes those peculiar to certain compounds which are not decomposed by a temperature that volatilizes them. There are but few such, and their spectra, which present broad colored bands rather than sharp bright lines, need not particularly engage attention.

In the third class of spectra there are found *dark*, interrupting lines or bands resulting from absorbtion; and this class may be subdivided into two: first, that of colored gases, marked by dark lines or bands, found also in the spectra of light transmitted through such gases; second, that of compound spectra resulting from the transmission of strong light through the flames of volatilized solid and gaseous elements showing in their spectra *bright* lines or bands. We have already seen that Sir David Brewster in 1836, reported the results of experiments made four years before on light passed through *nitrous acid*; there being produced a spectrum, in which certain portions were wanting,

their places being occupied by dark bands. Miller has shown conclusively that "the mere existence of color in a vapor, does not indicate of necessity the existence of bands in its spectrum; nor can the probable position of these lines be inferred from the color of the gas." "If the solar light be transmitted through a flame, exhibiting well marked black lines, these lines reappear in the compound spectrum, provided the light of day be not too intense compared with that of the colored flame; and it would therefore appear that luminous atmospheres exist, in which not only certain rays are wanting, but which exercise a positive absorptive influence on other light." In the spectrum of light transmitted through our atmosphere absorbtion bands are found, due, probably, to the presence of aqueous vapor.

Solutions of various organic coloring matters give spectra marked by these absorbtion bands. The presence of *blood* even in so minute quantity as the one one-hundredth to one one-thousandth grain may thus be detected, as was first shown by Hoppe. The blood of one animal cannot, however, be distinguished from that of another by this method of analysis, it being a coloring matter common to all that gives the dark bands. Stokes has shown that "the peculiar red pigment of the blood corpuscles" is not the *haematin* of Leeanu, but a different substance to which he has given the name of *cruorin*. Unlike haematin, it is soluble in water, and "is capable of existing in two states of oxidation, distinguishable by a difference of color and a fundamental difference in the action on the spectrum." *Oxidized*, or "scarlet" *cruorin*, of bright red, arterial color, when in solution and examined by the spectroscope, gives two absorbtion bands in the green, "one close to Fraunhofer's D, the other, (a little broader but not so well defined,) nearer the blue." *Deoxidized, reduced*, or "purple" *cruorin* gives only a single band, in the green, and seemingly formed by the coming together of the two bands of "scarlet cruorin." As shown by Sorby, if the blood examined be not fresh, but has been exposed to the atmosphere for a length of time, (varying with the locality, shorter in cities than in the open country,) the cruorin will be found to have undergone a change, to have become browned, and to produce in the spectrum a strong absorbtion band in the red, with great diminution in the intensity of color of the bands in the green. By the action of heat, alcohol, caustic potassa, caustic soda, or acids, (preferably citric, tartaric, or acetic, as not causing precipitation,) the cruorin

is converted into haematin, which may be in a state of oxidation or deoxidation, and will give upon analysis two different spectra. The spectrum of *red* or *oxidized haematin* shows an absorption "band in the red, another in the green, and, if seen by daylight, one in the blue," while that of *brown*, or *deoxidized haematin* gives two bands in the green, each lower than the corresponding band of scarlet cruorin.

In all the varieties of blood spectra, the violet end of the spectrum is cut off. The various coloring matters, the stains of which are liable to be confounded with blood stains, are all readily distinguishable one from another by their spectra, aided, in many cases, by chemical reactions. Letheby, referring to these coloring matters, says "few indeed, if any, will stand the test of ammonia, which only brightens the absorption bands of blood, while it alters the appearance of other colors; and if there be any doubt in the matter, a little sulphite of potassu will remove it, for this bleaches every color which is likely to be confounded with blood." The spectra of cochineal, lac-dye, alkanet, madder, each dissolved in an alum solution, differ characteristically from the blood spectra, though, to the eye, the stains may be identical in appearance.

In the *Medical Times and Gazette*, Aug. 18, 1866, Bence Jones reported the discovery of a substance in the blood and tissues closely resembling quinine in its spectral and chemical actions, and this discovery has been confirmed by the observations of Rhoads and Pepper at the Pennsylvania Hospital. Stokes, in 1852, reported that light passed through a solution of quinine and decomposed by the prism, showed in its spectrum certain pale bluish lines of light in the more refrangible part, due to the increased refrangibility of both the actinic and luminous rays, and the rendering visible of rays not previously obvious to the eye. Bence Jones in experiments to determine the rapidity with which quinine passed through the system so as to produce fluorescence in the tissues, found, to his surprise, that fluorescence was present, even when no quinine had been taken, and that there was normally present in the blood and tissues a substance which he named *animal quinoidin*, differing from quinine only in beginning to fluoresce before the latter, and giving a light slightly more greenish. The fluorescence can be detected when the quinoidin in solution is present in but one part to 1,800,000 of

water. Investigations have shown that this animal-quinoidin is much diminished by the action of marsh-miasm.

The second subdivision of this class of spectra, (embracing those that are interrupted by dark lines resulting from the transmission of white light through the vapor of elements that give bright-lined spectra,) is in many respects the most interesting of all, since it brings under consideration the spectra of the sun, the planets, and the fixed stars. Bunsen and Kirchhoff's great discovery was that "light emitted by an incandescent body is sifted by passage through any ignited vapor, the ray or rays sifted out being precisely those which the ignited vapor itself emits." In his first report, already referred to, made in October, 1859, Kirchhoff says: "I conclude further that the *dark* bands of the solar spectrum which are not evoked by the atmosphere of the earth exist in consequence of the presence in the incandescent atmosphere of the sun of those substances which in the spectrum of a flame produce *bright* lines at the same place—the relation between the power of emission and absorbtion being the same for all bodies at the same temperature." We may notice two theories that have been advanced respecting the constitution of the sun. Herschel in 1795 declared his belief that it consisted of a dark solid nucleus surrounded by a photosphere, (neither liquid nor an elastic fluid, but consisting of luminous clouds,) between which and the nucleus was a *light-reflecting* atmosphere which hindered the illumination of the nucleus by the photosphere. Kirchhoff maintains, on the other hand, that it is composed of a solid or liquid nucleus at the highest temperature of ignition, surrounded by a transparent atmosphere of somewhat lower temperature, probably, (judging from the length of the actinic spectrum,) about that of the oxy-hydrogen flame, 15006°F. He proves the correctness or at least the probability of the correctness of this theory by showing that the solar spectrum is crossed by dark lines just as is the continuous spectrum of incandescent lime when its light is transmitted through flames colored by various elements introduced. Prof. Osborn, of Lafayette College, in a late paper in the *Scientific American* strengthens belief in this theory. He says, "One of the most striking facts in my examinations occurred at our last analysis of a flame from a reverberating furnace on the Lehigh, at the wire works of Stuart & Co. The workmen held partly out a bar of intensely heated iron on the hearth of the furnace, when at rapid intervals

the dark lines which are seen in the solar spectrum appeared faintly but certainly fitting over the spectrum of the fierce flame by which the intensely heated iron was enveloped."

Comparison of the solar spectrum with the spectra of various elements has shown that there are in it dark lines corresponding in position and intensity with the lines of *sodium, calcium, barium, magnesium, iron, chromium, nickel, zinc, strontium, cadmium, cobalt and hydrogen*—all the lines of some of these metals not being present. In other words the luminous atmosphere of the sun contains the metals specified, *hydrogen* and *iron* being most abundant, while some of the others may be present in such small quantity that certain of their lines are absent—*potassium, copper*, and some other terrestrial elements may be present, and there may exist in this atmosphere certain elements not found on the earth. Other lines present in the solar spectrum are in all probability dependent upon the earth's atmosphere, which exercises a very powerful absorptive influence upon the sunlight; aqueous vapor, according to Cooke of Cambridge, being the most important if not the chief agent in producing such absorption. Janssen observed on the Faulhorn a general diminution of all the telluric groups of the solar spectrum lines, while the lines of solar origin retained their intensity and even gained in sharpness. (Glaisher, on the other hand, reported a diminution in the intensity of the rays of the spectrum as he ascended in a balloon.) We have already seen that Draper, years ago, noticed a variation during the course of the day in the intensity of certain lines, especially in the less refrangible part of the spectrum, and such variation ought to occur if the lines are of atmospheric origin; which late observations have shown to be the case, for Kirchhoff failed to find a line between Fraunhofer's A and B that corresponded with the line of any metal examined by him. These lines of telluric origin, Janssen discovered in the spectrum of candle-flame at some distance from him, while they were absent when the flame was brought near—and on one occasion he found them very abundant in the spectrum of a fire-light from which he was separated by the width of Lake Geneva, thirteen miles.

The planets, shining by reflected light, should give the same spectrum as the Sun, diminished however in intensity; and this has proved to be the case with the Moon and Venus. But the spectra of Jupiter, Saturn, and Mars, while they give the solar lines, do more than this. In the spectrum of Jupiter, for exam-

ple, there are not only present the principal Fraunhofer lines but other dark lines, some of which are identical with the telluric lines of the solar spectrum, while others are unlike any of the solar lines. The meaning of this difference between the light transmitted to this planet and that returned from it, is that Jupiter, like the Earth, is surrounded by an atmosphere, which like our own contains aqueous vapor, and in which there are also present certain elements with which we are not familiar. The same is true of Saturn and Mars—and the light which comes to us from these planets surrounded by atmospheres is reflected principally, it may be altogether, not from the planets themselves but from masses of clouds in their atmospheres.

Astronomers have long been satisfied that the fixed stars shine by-native and not reflected light; but spectrum analysis alone has afforded any positive proof of the truth of this opinion. It has shown that as star differs from star in the *intensity* of its light, so also in its *character*; and it has already revealed in part the elementary constitution of these stellar suns. The point-like images of various stars at the focus of the telescope have, by the use of a cylindrical lens, been lengthened out into lines of light, and their spectra have been seen to be crossed by the dark lines of different elements; *sodium*, *iron*, *magnesium* and *hydrogen* being among the most uniformly present. All the stars examined, over sixty in number, present lined-spectra, (the light being sufficiently intense and the atmosphere clear.) In nearly all the *hydrogen* lines are present, but in some of the "red or orange stars" they are wanting—in other words on these stars there is no water. If they are the centres of great stellar planetary systems, "to what forms of life could such planets be adapted? Worlds without water! A power of imagination like that possessed by Dante would be needed to people such planets with living creatures." If the dark lines are much more numerous or stronger in some parts of the spectrum than others, the light will not be white but complimentary to the more subdued colors—and thus Huggins and others would explain the cause of the various colors of stars; holding at the same time that the original light emanating from the incandescent solid or liquid stellar nucleus is always white. The spectra of the double-stars sustain this theory of color, for always in the one there will be found strong grouping of lines in the more refrangible, in the other in the less refrangible part of the

spectrm. The stars whose brightness is variable have been found to present corresponding variations in the amount and intensity of their spectral lines. The late temporary star in the "Crown," when examined by Huggins on the 16th May, 1867, presented a remarkable spectrum. Besides the usual dark lines there were seen four *bright* ones, the two principal of which corresponded in position with the hydrogen lines; whence it was concluded that the wonderful sudden increase and decrease in brilliancy was due to the envelopment of the star in the flame of burning hydrogen, and the later burning out of this gas.

The spectroscope has also been turned upon the light of comets and nebulae. The single comet thus far observed gave two spectra, the one of the tail, the other of the nucleus. The first was continuous, and was that of reflected sunlight—the other consisted of a single "short, bright line." The nebulae examined have proved to be of two kinds, the one giving continuous spectra like the stars, the other simply bright lines—the former corresponding quite closely with the nebulae capable of being resolved by the telescope—the latter with those not so resolved. Those giving bright lines simply must, so far as is at present known, be gaseous—and a *hydrogen* line generally and a *nitrogen* line occasionally has been recognized. The comet-nucleus observed must also have been gaseous like these true nebulae, and its spectral line was that of *nitrogen*. Huggins says "the detection in a nebulae of minute closely-associated points of light, which has hitherto been considered as a certain indication of a stellar constitution, can no longer be accepted as a trustworthy proof that the object consists of true stars. These luminous points, in some nebulae at least, must be regarded as themselves gaseous bodies, denser portions probably of the great nebulous mass, since they exhibit a constitution which is identical with the fainter and out-lying parts which have not been resolved. These nebulae are shown by the prisms to be enormous gaseous systems—and the conjecture appears probable that their apparent permanence of general form is maintained by the continual motions of these denser portions which the telescope reveals as lucid points." As has been suggested by Prof. Daniel Vaughan of this city, the bright lines of the spectrum supposed to be indicative of the gaseous constitution of nebulae, may, in some cases at least, be but the remaining portions of continuous (stellar) spectra, the other luminous rays of such spectra

having been absorbed by the interference of the lines of a vast number of elements.

Of what may be the practical applications to be made of spectrum analysis the scientific world can now form but little idea. It is a most valuable method of qualitative analysis, but as yet does not, probably never will, indicate the quantity of the elements present—hence is of comparatively little importance in the examination of earths and ores, or in the detection of poisons. In the regulation of some of the various processes of metallurgy it promises to be of great service. In the manufacture of steel by the Bessemer process, “the appearance and disappearance of spectral lines mark the progress of metallurgical operations. At the moment when the decarburization of the iron commences and when it has reached the proper limit, these lines seem essential modifications. The appearance of a group of lines and of one distinct line at the violet end marks an important stage during the formation of malleable iron—these lines disappear sooner than any of the others, this effect taking place within the last five minutes of the operation, so that they serve to denote the termination.” The spectroscope is already a recognized and valuable instrument for the detection of adulterations in wines; the recognition of the coloring matters of various vegetable products; and the determination of the presence or absence of blood, in medico-legal and other examinations.

ART. II.—*Influence of the Sympathetic in the Causation of Morbid Phenomena.—Illustrated by Cases.*

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I.

UNILATERAL SWEATING OF THE HEAD.

So singular a phenomenon as unilateral sweating of the head, must have attracted attention in every case in which it has occurred. Nevertheless, the information which we possess in regard to it, is rather unsatisfactory. These cases having happened under my observation, I have been at some pains to

look up the facts reported by others, so as to form somewhat more exact notions of the nature of this singular affection.

CASE I.—The first case was that of a cachectic individual who had a tumor, aneurismal or malignant, at the base of the neck, which had grown upward from within the thorax. Not having had an opportunity of examining this morbid growth, I cannot pronounce as to its nature; neither is the determination of this point material to the inquiry. The facts of importance are, 1st. the existence of a thoracic tumor on the right side of the thorax; 2d, the occurrence of unilateral sweating on the right side of the head. The sweating which was profuse, terminated abruptly at the median line. The pupil on the same side was contracted. No thermometric observations were made upon the temperature of the affected side; but there was considerable redness of the lobe of the right ear, and a subjective sensation of warmth in the affected parts.

CASE II.—The second case is a gentleman of Cincinnati, aged about 50; a retired merchant, in robust health.

About a year ago, he first observed that the right side of his head sweated very freely whilst the left side was almost free from perspiration. This difference in the activity of the sudoriparous glands on the two sides, became very marked indeed, so that he experienced great apprehension as to the result, although his general health continued good. When he consulted me, I explored the thoracic organs very carefully, especially the heart and great vessels, but I was unable to discover a tumor or lesion of any kind. The pupils were equal in diameter on the two sides, and there was no apparent alteration of the circulation in the right eye. Mental emotion, or active exercise caused the sweat to break out on the affected side, where it stood in enormous drops, almost no moisture being perceptible on the opposite side. A subjective sensation of heat preceded the outbreak of sweat, but I could not perceive that there was a real elevation of temperature. Neither the direct nor induction currents changed the condition of the parts. Sensation—of touch, of pain, of temperature—remained unaffected over the whole sweating region. There was no apparent disturbance in the function of any organ.

CASE III.*—S. M.—, aged 39; nativity, Ireland; occupation, laborer. Two years ago was attacked with a severe cold, since

*Reported by Dr. A. Guthrie, Resident Physician, Cincinnati Hospital.

which time, cough has been always troublesome. Has suffered once or twice from oedema of inferior extremities.

Condition on Admission.—He is emaciated, feeble, and wears a cachectic aspect; tongue almost clean; pulse 90 and full; appetite poor; bowels rather constipated; slight depression in right infra-clavicular region with marked dullness and much resistance on percussion; prolonged expiration in above mentioned site, and abundant mucus and sibilant rales over both lungs; rhythm of heart's action normal, as also, the area of precordial dullness. Careful examination of the great vessels, detects no evidence of aneurism or tumor. Hepatic and splenic dullness natural; there appears to be no particular fault in the digestive organs, except the want of appetite and the tendency to constipation.

The peculiarities for which the case is now reported are the state of the left pupil and sweating of the left side, especially of the head. The left pupil is more contracted than the right and does not respond so readily to the stimulus of light. When quiet there is a preceptible difference in the moisture of the right and left sides of the body. On taking active exercise the sweat stands in large drops on the left side of the face and head, the right being comparatively dry. The temperature of the right meatus auditorius is found to be $99\frac{1}{2}$ degrees F. whilst the left is 99 degrees F.; of the right axilla 99 degrees F., of the left $98\frac{2}{3}$ degrees F. After active exercise the temperature of right meatus is $98\frac{1}{2}$ degrees F. and of left $98\frac{1}{2}$ degrees F.; of right axilla $98\frac{1}{2}$ degrees F. and of left 99 degrees F.

Commentary.—Cases of partial sweating have been reported by Rayer and other writers on the diseases of the skin, by whom this affection is styled "partial idrosis." Wilson* reports a case in which this idrosis was confined to one side of the head, but he has not offered any explanation of the cause of this singular limitation of the sweating. He views it, as do other dermatologists, as an affection of the skin itself; but we shall see that when it occurs even as an independent disease, it no more pertains to the domain of dermatology, than *herpes zoster*.

Gairdner† appears to have been the first who recognized the relation existing between this symptom—unilateral sweating and aneurisms or other tumors of the chest. In his clinical observations on thoracic aneurisms, he thus alludes to this subject:

*Diseases of the Skin. Philadelphia, Ed. 1863 p 543.

†Clinical Medicine, Edinburg, 1862, p. 557.

"The curious symptom of strictly unilateral sweating, stopping short quite abruptly at the median line and occurring (in one case almost constantly) over the face and scalp of the affected side, has been observed by me in two cases only, in each of which it concurred with a contracted pupil."

Dr. Ainstie* relates in his work on Narcotics and Stimulants, a case of unilateral sweating on the left side of the head occurring in an epileptic boy. The attack of sweating preceded the epileptic paroxysm. Unfortunately, we have no record of the state of the pupil in this case.

Two cases of unilateral sweating of the head in connection with epilepsy, have been lately reported,† one having occurred at the Birmingham General Hospital in care of Dr. Russell, and the other at the National Hospital for Epilepsy and Paralysis, under the care of Dr. Ramskill. In Dr. Russell's case the state of the pupil is not reported. With regard to the latter, it is stated, that "as the heat reached the face, the cheek became much flushed, so that his wife frequently became aware of what was happening by this circumstance alone. The perspiration which accompanied the heat and affected all the left side was most profuse; the moisture poured off him." In Dr. Ramskill's case the "perspiration was profuse on the right side, and was abruptly limited at the middle lines of the nose and lips, but extended very slightly to the left of the median line of the forehead." Statical electricity "produced profuse perspiration on the right side and not on the left." The pupil on the sweating side was "a little larger than on the other."

Bazire‡ reports in an appendix to his translation of Rousseau's Clinical Medicine a case of progressive locomotor ataxia in which, when a paroxysm of pain came on the patient's forehead on the left side was covered with sweat, whereas the right side remained dry. In this case the left pupil was always larger than the right.

In the *Medical Times and Gazette*,|| allusion is made to a case in the London Hospital, under care of Dr. Andrew Clark, in which sweating on one side of the head occurred in connection with thoracic aneurism. As in Dr. Gairdner's cases, the pupil on the

* Amer. Reprint, p. 78--100.

† Medical Times and Gazette. April 7, 1866.

‡ Translation of Rousseau's Clinical Medicine, p. 184:

|| April 7, 1866.

sweating side was contracted. But still another case of unilateral sweating of the head is reported in the same journal, in which there was "no other discoverable deviation from health."

When we come to analyze the instances which we have thus collected, we find that unilateral sweating of the head was associated with three classes of cases: with aneurismal or other tumors of the thorax; with certain neuroses, as epilepsy, progressive locomotor ataxia, etc.; without any appreciable alteration in the function of any part except the skin affected.

What explanation can be given of these results?

With regard to the first class of cases there can now be no doubt of the correctness of Dr. Gairdner's explanation. He attributes the sweating to pressure of the new formation upon the cervical sympathetic or its branches; a paralysis is thus induced of the vaso-motor nerves, and an increased supply of blood is thrown into the capillaries of the sudoriparous glands; or, as a result of the irritation of the sympathetic, increased secretion takes place in the glandular apparatus to which the nerves irritated are distributed. The first explanation is predicated upon the remarkable experiments of Claude Bernard,* who demonstrated that division of the cervical sympathetic was followed by unilateral congestion of the head upon the same side.

In the case of unilateral sweating of the head dependent upon aneurismal or other tumors involving the cervical sympathetic, contraction of the pupil, or a small motionless pupil, on the same side is generally observed. This observation has been formulated by Mr. Hutchison† as follows:

"A motionless pupil of rather less than usual size, and quite unable to dilate when shaded, is characteristic of paralysis of the radiating fibres of the iris. It is met with in connection with aneurisms and other tumors in the neck, and with direct injuries to the cervical cord, or to the trunk of the sympathetic."

Phenomena somewhat different from the preceding accompany unilateral sweating in the neuroses. In Dr. Ramskill's case of epilepsy, the pupil was dilated instead of being contracted; statical electricity induced the sweating. These two facts seem opposed to the view that paralysis of the sympathetic (vaso-motor) was the sole cause of the phenomenon observed. Con-

* *Lecons sur la Physiologie et la Pathologie du Systeme Nerveux.* Tome II. p. 469, et seq.

† *London Hospital Reports,* Vol. III. p. 388.

traction of the pupil is a result of paralysis of the radiating fibres of the iris which are governed by the sympathetic; and, as has been demonstrated by Brown Sequard, an electric current applied to the divided extremity of the cervical sympathetic, causes a contraction of the radiating fibres of the iris and the circular fibres of the arterioles—the unilateral congestion disappearing. A case of epilepsy now under my care in the hospital of the Good Samaritan, in which opposite but parallel phenomena occur, will serve to illustrate the questions here involved.

CASE III.—The patient, a boy 13 years of age, has the *petit mal* and the *grand mal*. The *petit mal* is a rigor confined to the left upper extremity and left side of the head. An aura starts from the second phalanx of the left thumb; a subjective sensation of coldness is experienced in the left arm and left side of the face; the teeth chatter. The pupils remain large and not readily mobile. Here we have evidently a spasm of the vaso-motor nerves of the part in which the subjective sense of coldness occurs. The state of the pupils shows that the circular fibres of the iris, under the control of the third pair are in a condition of paresis.

I therefore conclude that in the neuroses, the influence upon the vaso-motor nerves, resulting in unilateral or partial sweating must be derived from the nervous system of animal life—a reflex influence—and hence, probably, different in character from the paralysis of the vaso-motor nerves induced by pressure of an aneurism or other tumor—a direct influence.

We have still remaining for consideration those cases of partial idrosis, or unilateral sweating not dependent upon any appreciable lesion. In these cases a remarkable modification of the function of the sudoriparous glands occurs without apparent cause, and hence it would, on superficial view, be considered merely a local affection of the skin itself. The influence which the sensory nerves are now known to exert over the nutrition of the parts to which they are distributed, forbids such a supposition. In order to exhibit this influence of the sensory nerves, I will narrate an illustrative case.

CASE IV.—A soldier received by accident a thrust from a comrade's knife just behind the inner condyle of the humerus. As it was but a slight scratch, involving apparently the skin only, little attention was paid to it. The man, however, soon dis-

covered that he had lost sensibility in the ring and little fingers and other parts to which the ulnar nerves is distributed. These parts were found to be colder than other portions of the hand; the skin became bluish; flexion of the little finger took place; and six months after the injury a peculiarly unhealthy inflammation and ulceration occurred in the second phalanx of the little finger.

Mr. Hutchison* who has lately studied the influence of division of nerve trunks upon the nutrition of parts, has reported a number of facts of the same character. Our countrymen Drs. Mitchell, Morehouse and Keen,† were probably the first to interpret aright the effects of division of nerve trunks upon the nutrition of the skin and its appendages. For a long time, however, it has been known that irritation of nerve trunks was followed by alterations in the nutrition of parts, as for instance the destructive inflammation of the eye consecutive to the division of the fifth pair, but these lesions were supposed to be due to mechanical causes and to injury of the sympathetic; the fifth pair receiving filaments from the sympathetic at the ganglion of Gasser. In a case of cerebral tumor, which I have reported in my article on tumors of the brain in the *American Journal of the Medical Sciences*, for April of the present year—an obstinate *herpes labialis* occurred on the lip, which was the seat of a violent neuralgic pain. Prof. Barensprung‡ and Mr. Hutchison || have shown that *herpes zoster* and other varieties of *herpes* are produced by irritation of nerve trunks. All the facts bearing upon this question have been collected by Mougeot§ in a pamphlet on lesions produced by injuries of nerves. There is, however, a difference of opinion as to the true "trophic nerves." The authorities I have named believe that the sensory nerves exercise a peculiar influence over the nutrition of the part to which they are distributed. On the other hand there are those who maintain that the ganglionic nerves are the only true trophic nerves, and that in all cases of injury of nerve trunks followed by the lesions of nutrition which have been described, there occurred some injury to the sympathetic. This latter view has

* London Hospital Reports Vol. III., p. 305.

† Gunshot Wounds and other Injuries of Nerves, Phila., 1864, Chap. 6.

‡ British and Foreign Medico Chirurgical Review, Jan., 1862.

|| London Hospital Reports, Vol. III. op. cit.

§ Recherches sur quelques troubles de nutrition consecutifs aux affections des Nerves, Paris, 1867.

been elaborately maintained by Echeverria* of New York, who has collected in his work on reflex paralysis all the information on the subject. In a paper which he read recently before the Connecticut State Medical Society, upon the subcutaneous injection of strychnia for the cure of paralysis, he has brought forward some additional arguments in support of his position. Mr. Hutchison has so tersely and clearly stated the facts in respect to this controversy, that I can do no better than quote his words:

"Many clinical facts seem to me to concur in pointing to the sensory nerves as those of most importance in reference to trophic disturbance. At any rate, if it be not the sensory nerve fibres themselves, it must be some others which travel in close company with them, which are the important ones. Paralysis of the cervical vaso-motor nerves, although followed by increased supply of blood is not productive of inflammation. Nor have we any facts in support of the idea that injuries to motor nerves cause inflammation. On the other hand we find in reference to sensory nerves the following facts: 1st. The crop of vesicles characteristic of herpes zoster is usually mapped out most accurately by the area of distribution of some sensory nerve. 2nd. That when a sensory nerve such as the first division of the fifth is paralyzed, inflammation often follows (of the eye in the case of the fifth.) 3d. That when certain sensory nerves are irritated, (not paralyzed) reflex inflammation often ensues. 4th. That after section of mixed nerves, or of the spinal cord, the parts left without sensation often inflame."

In the third variety of the cases of unilateral sweating of the head in which this symptom occurs without any other recognizable lesion, it is probable that the disorder consists in a disturbance in the function of the trophic nerves distributed to the part. An irritation of a sensory nerve may produce increased secretion (as the ophthalmic branch of the 5th.) The trophic power of the fifth is now universally admitted, but there are those who believe that this power is derived from the filaments of the sympathetic which join it. Do the cases here narrated furnish any indications? Case III. seems to me to show plainly that the increased secretion is due to a disturbance in the function of the sympathetic; but the only proof of this is the contracted

*Reflex Paralysis, New York, 1866.

pupil. Pfluger* has attempted to show that the secretion of glands is directly under the control of the nerves distributed to them and not by a modification of the nutrient supply of blood. This view is in a measure supported by the experiments of Wittich who demonstrates that the "relations of the sympathetic to the parotid are not those of an inhibitor of its secretory functions, but is to be regarded as a direct agent in exalting its activity, and this, not by acting on the blood vessels and modifying the supply of blood, but by immediate action on the gland cells themselves, since the power is exerted when the flow of blood is stopped."

There is manifest at the present time, a strong tendency to consider the functions of the nervous systems of animal and organic life as entirely distinct. They are, however, so intimately united by connecting filaments and the reactions between them are so constant and mutual, that such an exclusive view of their respective offices, must lead to the formation of erroneous pathological notions.

The intimate relations existing between the nervous system of animal and organic life, and their mutual dependence, are well exhibited in those curious affections—the restraint neuroses—a form of morbid nervous influence which I shall discuss in the second part of this paper.

ART. III.—*Report of a Case of Puerperal Convulsions.*

EDITOR LANCET AND OBSERVER:—I was called, on Wednesday May 13th, 5 A. M., 1868, to see Mrs. R—, a plethoric young woman, below the medium size, aged 26, primipara. Her antecedent history was good. There was no hereditary predisposition, nor had she suffered any previous disease or injury: excepting that during the past two weeks she has had an occasional pain in the head. The headache became more and more severe every day. When, on the night of the 12th, she became partially unconscious. I saw her early on the morning of the 13th, just as she was emerging from a violent attack of convulsions. Her eyes were much swollen, and her tongue swollen and bleeding. The pulse was full and strong and the head hot. The os-uteri had not begun

* Sydenham Society, Biennial Retrospect, 1867, p. 14.

to dilate. She passed urine involuntarily. She has had no previous treatment. The plan of treatment used was: cold water applied freely and constantly to the head, venesection, (abstracting four or five ounces of blood from the arm) and moved the bowels freely by a cathartic enema. The measures had but a partial effect. In one hour another convulsion followed which was met by the same treatment. The patient now vomits a very green bilious fluid. The vomiting soon ceased. The convulsions recur every hour with great violence and regularity, lasting from twenty to thirty minutes each. During the interval she is entirely unconscious. From 9 A. M. to 11 A. M., I made free use of chloroform, with no apparent good effect. The convulsions continued at the interval of an hour until 2 P. M.; just previous to this time, I found that the os-uteri was dilating slowly, with a vertex presentation. I now injected two grains of Sulphate of Morphia by the Rectum, and sent to Cincinnati (distance 5 miles) for Dr. H. E. Foote—no more spasms occurred until $5\frac{1}{2}$ P. M. Dr. Foote having arrived and examined the case, witnessed this convulsion. After consultation we determined to practice venesection, as it was plainly indicated in this case. We abstracted thirty (30) ounces of blood, and closed the orifice. This operation was immediately followed by another spasm. The Doctor now opened the same orifice again, and abstracted thirty-two (32) ounces more of blood—no more spasms occurred after the last blood-letting. Counter-irritation was now applied to the back of the neck. When the os became sufficiently dilated we ruptured the membranes. The labor progressed slowly, and she was delivered of a dead fœtus on the 14th, at 6 A. M. I continued the counter-irritation to the back of the neck, and on the morning of the 15th she became conscious. The return of intelligence was complete (but without recollection.) She had eleven convulsions—was unconscious for more than forty (40) hours and lost by venesection between 60 and 70 ounces of blood. The case now resolved itself into a simple one; there were no untoward sequellæ, and she made a good recovery.

W. L. DAVIS, M. D.

Delhi, O., June 8th, 1868.

ART. IV.—*Physiological Character of Rheumatism.*

BY J. S. UNZICKER, M. D., CINCINNATI.

According to Prof. L. Schoenlein, the electricity of the skin is changed in a most remarkable manner. We know that the skin in a normal state continually evolves electricity, which is the product of vital events; we also know this electricity under certain changes positive, under others negative, and that the quantity according to different external and internal influences differs. But in Rheumatism no more electricity is found upon the skin, but the skin which in a healthy state as a conductor draws the internally developed electricity to the surface, suddenly becomes an isolator. The electricity now accumulates under the skin, accounting for the peculiar and severe pains existing, hence the frequent appearance of hydrops in severe Rheumatism. It would be worth while if these waters were chemically examined for their contents of electricity, for that this differs from other hydropsical waters connot be doubted.

Individuals of dark skin are seldom attacked by Rheumatism compared with those of fair and tender skin; a circumstance which undoubtedly exerts an essential influence upon the geographical distribution of rheumatism. If we, besides, consider the behavior of carbon relative to its conductability to electricity, we can no longer remain in doubt about the explanation of this phenomena. If Rheumatism attack the flexor muscles, the extensors remain free, and *vica versa*. It may first attack the muscles of the chest, subsequently those of the abdomen, or it may attack the intercostals first, leave them and locate upon the pectorals, etc.

The above will explain why in the topical treatment relief is obtained by frictions with idio-electric bodies, with wool, fur, flannel, hair-brushes, etc. By which the skin recovers its natural conductive power.

On the Use of Grimault & Co's. (Chemists of Paris) Iodized Syrup of Horse Radish as a Remedy for Chronic Bronchorrhœa, Lymphatism and Scrofula.

BY DR. PETIT.

The extreme infatuation in favor of the various kinds of Cod-Liver Oil having somewhat subsided, those who hold a sound

and judicious opinion of the advantages and inconveniences have some chance of being heard.

Without wishing in any way to disparage the cures effected by this medicine we can truly assert, that many persons cannot keep it on their stomachs, and a still greater number support it with great difficulty, notwithstanding all the efforts that have been made to remove or mask its disagreeable taste. In these cases, which are very frequent, the physician is glad to have it at his disposal an efficacious medicine as a substitute or adjuvant for Cod-Liver Oil. Grimault's Iodized Syrup of Horse Radish is such a desideratum.

This excellent preparation, which combines the elements of the antiscorbutic syrup of the official Pharmacopaeian Horse Radish, scurvy-grass, marsh-trefoil, cress, orange-peel, to which is added one ounce of iodine for every two hundred ounces of Syrup and in a state of organic combination analogous to that, which exists in Cod-Liver Oil, is calculated to produce in all cases the most satisfactory results.

I have prescribed it for many years past, and I can affirm that it has never disappointed me in the various manifestations of scrofula, such as swelling of the glands, impetigo of the face chronic coriza, etc. Its efficacy has always appeared to me, undeniably, especially in certain affections of the respiratory organs, more particularly in chronic bronchitis, in which it has produced most rapid and lasting amelioration.

In bronchorrhœa, when there is considerable secretion under the influence of which patients soon grow thin, and lose all appetite, the use of Grimault's Iodized Syrup of Horse Radish, in daily doses of three or four table-spoonsful has a most beneficial effect.

Under the influence of this medicine a favorable modification in the nature of the fluid secreted is soon evident; from being purulent and muco-purulent, as before, it becomes mucous, then decreases in quantity, and if not entirely, especially in the case of elderly persons, it becomes insignificant and the patient, expectorates only a little phlegm on awaking in the morning, the appetite soon returns and the excessive perspiration ceases.

The opinion here expressed is in reality the result of very numerous cases in my private practice, which justify me in drawing the following conclusion:

Whenever Cod-Liver Oil is taken with excessive repugnance or with difficulty borne by the patient's stomach, when, in children especially, it causes diarrhea, the Iodized Syrup of Horse Radish will be found an advantageous substitute.

The treatment of glandular swellings and suppurations, the Iodized Syrup of Horse Radish is always more successful than Cod-Liver Oil. Only in case of juvenile patients, we always insisted on their taking twice a day: basin of good broth, eating after each a slice of bread and butter sprinkled with salt.—*Extract from the "Tribune Medical," of the 1st March, 1868.*

Hospital Reports.

Cincinnati Hospital.

SURGICAL CLINIC OF DR. W. W. DAWSON.

Reported by M. B. KELLAR, M. D., Assistant Resident Physician.

Fracture of Both Clavicles.

John McCath, age 30: nativity, Ireland; laborer; entered May the 26th. Passenger on the Major Anderson.

States last night about 11 o'clock P. M., he was enjoying a quiet sleep, on deck, in close proximity with a bail of hay—was lying on left side, with elbow under his head. He was very abruptly, and unceremoniously aroused, by a man of about 180 pounds weight, who, it seems, had been sleeping on the bail of hay, falling on him, striking him (the patient) on the right shoulder.

The patient immediately on receiving the blow, felt as if something had given way, or broken. He had great pain in both shoulders, becoming almost excruciating when any attempt was made to move either. Soon after receiving the injury he was brought to this hospital.

Present Condition.—Man of medium size, good muscular development, a little anæmic, which is probably due to intermittent fever, which he has had for three weeks.

On exposing shoulders, it is observed that both are a little depressed, and thrown forward, motion of either shoulder produces great pain. On tracing course of right clavicle, from sternal end, at commencement of outer third, is the result of an

old and firmly united fracture, which occurred some three years since. About an inch further on, there is an interruption of the smooth superior surface of the bone. At this point there is great pain under pressure, and very distinct crepitus. The distal end of the proximal fragment is elevated, while proximal end of distal fragment is depressed. A similar examination of left bone reveals a sharp, hard projection, about commencement of second fourth of sternal end. From this point, to about middle of bone posteriorly, is a straight fissure, crossing bone obliquely. At this point there is increased mobility, great pain under pressure, and very loud crepitus, of a harsh and grating character.

We will apply to this case a figure of 8 bandage.

Double fracture of the clavicles is a rare occurrence; it more frequently happens to children than to adults. Malgaigne found it but once in 2,358. Hamilton in his "Report on Def. and Frac." gives two cases. The bones here are broken at the same point, and the displacement about such as you see in cases where the fracture is internal to the coraco-clavicular ligament. The accident you will observe from the history was caused by a heavy man falling from above and striking our patient on the point of one shoulder, the other being in contact with the floor of the boat.

Phimosis—When and How to Operate.

I bring two cases of phimosis before you to-day, gentlemen, for the purpose of showing you *when* and *how* to operate for the relief of this accident. In congenital cases the time is not a matter of much importance, as the operation is resorted to generally to promote cleanliness; nor is it pressing in a case arising from gonorrhœa, where you have merely a thickened and contracted prepuce, but in syphilitic cases in which ulcers are concealed beneath the forward skin, ulcers which cannot be reached by local means, the time when you will operate becomes a matter of the most grave importance. Several cases have occurred under my observation in this house, where the glans penis was almost entirely destroyed before the foreskin was removed. In one case the glans was supported merely by a slim pedicle and had to be removed. You remember a case also, operated on a few weeks ago, in which large excavations were shown when the glans was exposed.

I advise you to operate in these cases early; use your best means to reduce the swelling, inflammation and tension, but

when you fail, resort to excision. Do not wait until your patient is seriously and often irreparably damaged.

What are the objections to an early resort to the knife? The first and the principal one is that the cut surface may take on the diseased action, and instead of having a small you have a large suppurating surface; this sometimes, but does not always happen and when it does you have the disease in hand—you can reach it and arrest it.

Prof. Bumstead in his admirable work on Venereal Diseases gives this caution. "Now the mere suspicion of an ulcer within the hidden folds of mucus membrane is sufficient to induce great caution, in resorting to an operation which may be followed by inoculation of the edge of the wound." If the concealed ulcer be a chancre, which according to the teachings of Bumstead cannot be inoculated, then there can be no danger of the raw edge of the wound becoming affected. If the ulcer be a chancroid your patient can not be greatly damaged by a mere increase in its size, nor will the danger be increased if it be a "mixed ulcer."

Phimosis from Gonorrhœa and Chancres.

I. M—, colored; aged 19; nativity Texas; farmer. Entry March 2d, 1868.

States that two months ago he was exposed to contagion. In nine or ten days thereafter had all the symptoms of acute gonorrhœa. The discharge under treatment gradually subsided but did not entirely disappear. Six days before his entrance here a bubo appeared in the left groin, which rapidly enlarged.

Condition on Admission.—Substantially built; firm fiber; general condition good. The discharge from penis is gleety. The glans—at least that portion of it which could be seen—was covered by quite a number of small superficial ulcers which discharged a thin serous fluid; the glans is phimosed. The prepuce is not much if any swollen. The bubo in left groin is soft and fluctuating and of medium size. No evidence of any constitutional affection. The bubo was opened March 7th, and astringents injections applied between the glans and prepuce.

April 25th. The bubo has healed up, but there is no material change in the ulcers on the glans, unable to reach them on account of the continuance of the phimosis.

In this case, gentlemen, I preform the ordinary operation of circumcision. I draw the skin in front of the glans, hold it between the blades of a pair of forceps and by one stroke of the knife remove it; this leaves the mucus membrane still intact, this is now slit up from before backward as far the corona and then the two divisions incised. The skin and mucus membrane are united by sutures.

Phimosis from Chancres.

James S—, colored; age 18; nativity Louisiana; barber. Entry April 18th, 1868.

Says that three weeks ago was exposed to contagion and a week back his attention was called to a large ulcer, on the left half of prepuce, causing the foreskin in a few days to swell so much that he could not retract it. Ulcer is very painful; has a bubo in either groin—small and painless.

Condition.—Average build, rather below medium size and somewhat anemic. The phimosis is so complete, and the swelling so great that it is impossible to see the ulcer or ulcers; or estimate the amount of damage done. The discharge is purulent in character and profuse in quantity, has severe nocturnal erection. No constitutional infection detected.

A carbolic acid wash (gtt. xxx to 3*i*) was used as an injection to be forced between prepuce and glans, and a poultice applied externally—this treatment failed.

In this case I will remove the swollen and inflamed prepuce, by an operation much more simple and satisfactory than that resorted to in the former.

I take as you see a pair of scissors with blades about one and a half inches in length. I divide the foreskin in the median line, as far as the summit of the glans, then with two more clips of the scissors one on either side, the prepuce is removed on a line with the corona, the edges are united by sutures as in the former operation. This operation is to be preferred—1st. Because it is so easily and speedly performed. 2nd. It leaves the penis in a more shapely state, hardly a trace of the incisions being left. 3rd. There is no danger of removing too much of the integument of the penis, as sometimes happens in ordinary circumcision.

Gonorrhœa Treated by Oil of Sandal Wood.

CASE FIRST.—William H—, age 38; nativity Germany; laborer. Entry May 19th, 1868.

States that twenty-eight days ago had impure connection, and in eight days after had all the general as well as local symptoms of an acute attack of blennorrhagia.

Condition.—A man of good health and of strong and vigorous constitution. After the administration of an active cathartic, he was put on an emulsion of cubeb and copaiba which he continued to take without benefit until the 30th inst., when the emulsion was discontinued, and the following substituted:

R.—Oil Sandal Wood gtt. lxxx.

Liq. Potassa 3ij.

Aqua Menth Pip. 3ij.

M.—S. Teaspoonful three times dialy.

June 5th. Discharge has ceased.

June 8th. Discharged cured.

CASE SECOND.—William G—, aged 22; nativity Ohio; clerk. Entry May 21st.

States that eighteen days ago was exposed to contagion, and fifteen days after noticed a discharge from urethra followed soon by swelling of glans, stinging pain after emission of urine, and painful erections. Never has been diseased before.

Condition.—Of medium size; rather lax fiber, general health however, good. Was ordered same prescription.

May 28th. Discharged cured.

CASE THIRD.—Hengo B—, aged 24; nativity Germany; confectioner. Entry May 21st.

States that a few weeks ago had impure connection, and in eleven days after had all the symptoms of an acute attack of gonorrhœa—took nothing for it.

Condition.—Rather small in stature, lax in fiber and sallow in complexion. The discharge from urethra is greenish in color, thick in consistence and protuse in quantity. Was ordered a saline purge and the prescription in cases first and second given.

June 1st. Discharged cured.

I present these cases of gonorrhœa to you this morning, to show you the effect of the oil of sandal wood in their treatment. This remedy has of late been highly extolled in this disease, but as much has been said at various times of scores of articles of the *materia medica*. Hardly a month passes that we are not presented with a specific, but when subjected to trial they all fail, and we are compelled to fall back on Balsam *Copaiba*, the old, and, I believe, the most reliable agent which we possess.

The prescription you will notice in these three cases contains *Liqor Potassa*, which in itself has some reputation in urethral inflammation, hence the results are far from stamping the oil of sandal wood as a specific.

Here, however, follows two other cases treated by the oil alone which give it more claim to attention.

CASE FIRST.—John Stevens, aged 30; laborer. Admitted June 20th.

Says that eight days ago a purulent discharge began from the urethra. At time of admittance there was an abundant purulent discharge. Was placed forthwith upon the following:

R.—Oil. Sandal wood $\frac{3}{4}$ ij.

Aqnæ. Menth. Pip. $\frac{3}{4}$ ij.

Pulv. Acaciæ. Q. S.

M—Ft. Emul.

S.— $\frac{3}{4}$ j. Ter. Die.

On June 22d, discharge continued about the same.

June 25th, there was a marked diminution in the discharge.

June 27th, there was only a slight mucus discharge.

June 29th, nine days after admission, dismissed cured.

CASE SECOND.—Admitted June 20th; aged 28. Has had gonorrhœa for thirteen weeks with slight chordee. Says he has been medicated internally and has also used astringent injections. Was placed upon the above formula and the spongy portion of urethra painted, with Tr. Iodine (dil.) with the following result: June 22d, discharge from penis diminished very much. June 25th Chordee has about subsided; discharge very slight.

June 27th, one week after admittance, dismissed cured.

Both of these patients were first thoroughly purged with magnesia sulphas, and then kept quiet in bed.

Gonorrhœa is generally a simple and harmless but troublesome disease, occasionally, however, it has complications of a most grave character. In one case, which came under my observation

some years ago a gentleman had, in connection with a slight gonorrhœal discharge, *first an abscess in the right side of the scrotum then a suppurating bubo, and following these an abscess in the left scrotal sac.* These three abscesses remained open, discharging a thin unhealthy pus for nearly one year, until finally a long ride on horseback produced a commotion in the affected region, severe inflammation followed and the fistulas closed.

Orchitis is not an uncommon accompaniment, it terminates usually in resolution but sometimes a testicle is lost.

Stricture is the worst accident which attends this disease. Here is a patient which you have seen frequently in this amphitheatre, he has a hard unyielding stricture in the membranous portion of the urethra, which I have failed so far in passing. I intend, when I can get through the contracted part, to make a perineal section—to perform Syme's operation—an operation only applicable to those strictures which can be penetrated.

Treatment.—Avoid injections; diuretics and cathartics are the remedies on which you should rely. The abortive treatment, the injection of strong solutions of Nitrate of Silver, is vile—true, it sometimes effects a speedy cure but it is frequently, very frequently followed by stricture.

Medical Societies.

Proceedings of Cincinnati Academy of Medicine.

JOHN DAVIS, M. D., PRESIDENT,

J. L. NEILSON, M. D., SECRETARY.

COMMUNICATION FROM B. F. RICHARDSON.

EDITOR LANCET AND OBSERVER:—The last number (July) of your journal contains, as a part of the proceedings of the "Cincinnati Academy of Medicine," a portion of the discussion on Diphtheria; the subject having occupied the meetings of the society during many weeks. Having been present but part of two evenings, and those disconnectedly, having had no opportunity of correcting the minutes, and being absent during the deliverance of Dr. Wm. B. Davis without subsequent occasion for oral reply, I am under the necessity of responding to his statements concerning myself, through your columns. I should be disposed to let the matter pass were it not that I have been and still am before the profession as a teacher in the department of

diseases of Women and *Children*. For that reason, if for none other, I can not premit the erroneous statements of Dr. Davis, in reference to myself, to go upon the published record uncontradicted, imputing to me, as they do, inexcusable ignorance or something worse. As you have omitted the antecedent publication of the greater part of what I said upon the subject, as a matter of mere justice to myself, this course becomes imperative.

There are those who "cram" themselves for special occasions. There are others who review and so alter and amend their remarks for publication as to be no longer recognized as their utterances upon the floor of the Academy. I make this statement of fact simply that your readers may learn that which they were entitled to know long ago, viz: that in this way some members of the Academy are made to appear to a much better advantage than do others, in the published proceedings of that institution.

That your' readers may judge upon what grounds, if any, Dr. Wm. B. Davis has presumed to put in my mouth, certain assertions, I desire that you publish the accompanying transcript of the previous proceedings of the Academy, kindly furnished me by the Secretary, Dr. J. L. Neilson; which embodies in substance all I had to say on the subject, not already published in the May number of your Journal. I wish to direct especial attention to the first nine lines of Dr. Davis' opening paragraph. Nothing that I said, nothing that I am reported in the minutes as having said, affords the least foundation for these bold assertions. Further, at the conclusion of the paragraph the gentleman contradicts himself, for, after stating that I had "even gone so far as to challenge the production of any authority that stated it, (Diphtheria,) did recur," he remarks as follows, after quoting from Dr. Flint, that diphtheria may occur in the same person once or frequently, "that the gentleman (myself) had thought this deliberately expressed opinion must have been a typographical error, etc." Having "postulated" a man of straw, Dr. Davis proceeds at once to his demolition, in which he succeeds as well as do most persons when they have every thing their own way. "Regretting" my absence he, of course, had to do the best he could under a circumstance so unfavorable to fair dealing. His facetious remarks upon my allusion to Bretenneau, in which he attributes to me the innocent delusion of supposing the said writer to be "one of the ancient authorities," one of the

"Fathers of Medicine," is quite refreshing, and must have been a severe strain upon his modesty. 'Tis a pity the record squelches it.

If the Doctor had given his attention to some other portions of my observations it might have been more profitable to his hearers and your readers, though, perhaps, less easy and agreeable to himself. With this introduction I submit the transcript of my remarks as follows:

Academy of Medicine, April, 1868.

Dr. Richardson said that he had not been present at the discussion, except on the evening that he had spoken, and consequently did not know what had been said in the Academy, either before or after the evening in question. He had been lead into the discussion from a different position than he had at first thought to occupy, by the statements of Dr. Carroll in regard to the similarity of the diseases Diphtheria and Scarlatina. He had, on that evening, given the differential diagnosis so far as it related to Scarlatina, and to the first and second stages of Diphtheria, carrying his description to that point where the last named disease takes one of two courses, either terminates in convalescence, or goes on to involve the air-passages, and to produce, probably, a fatal result. An additional condition in the disease was that which occurs in Scarlatina, Typhoid Fever, and in all zymotic diseases, namely, Anæmia. But there was this difference in its manifestations, that it was liable to be accompanied in Scarlatina by anasarca, and in Diphtheria by paralysis. The speaker then recapitulated at length, the differential diagnosis between Scarlatina and Diphtheria as follows: Diphtheria comes on insidiously; pulse does not materially increase in frequency, until the involvement of the air passages late in the disease; the efflorescence is dark colored (if it appears at all) and transient, seldom lasting longer than twenty-four hours; comes out irregularly in patches which are not regularly diffused; there is rarely any enlargement of the tonsils, and cervical swelling does not come on until late in the first stage of the disease; the exudation commonly involves the larynx, but the appearance of different points of exudation is not due to a direct extension of the disease from the fauces, but is consecutive, and is developed independently of already existing deposits.

On the other hand, Scarlatina attacks boldly, is ushered in by

chill, followed by heat of surface, rapidity of pulse, and other violent febrile symptoms. The eruption is regularly developed from above downward, evenly diffused, and lasts five, six, or seven days. There is usually, early in the disease, cervical as well as tonsilar enlargement, but involvement of the larynx is of the rarest occurrence. The throat difficulty is increased by the direct extension of the inflammation, and is not consecutive. Having thus shown the marked distinction between Diphtheria and Scarlatina, there arose the question of the similarity of Diphtheria and Croup; but he could not see how it was possible for any one to confound Sthenic Croup with the disease in question—they were in every respect so markedly dissimilar. Such a thing might be possible in cachectic and broken down constitutions, but never in regard to the more vigorous cases.

The speaker then went on to consider Diphtheria as a distinct disease of the throat. It had been said in the Academy that Diphtheria was epidemic sore throat, with or without exudation: but he did not see how, at this day, such an opinion could be held, and to go forty years back, to the time of Bretonneau's writing, for a description of Diphtheria, was not at all necessary or wise. Medical men were to-day, to say the least, just as competent to judge of disease as the older writers; for when the endeavor now is to sharply draw the line of distinction between diseases, if we go back, we only see the utter want of clearness and definiteness of description. He did not propose to cover all the ground, or to go into a detailed account of authorities; but he thought it was of the greatest importance to arrive at some definite and satisfactory opinion. There was undeniably a great popular fear and dread of the disease, and if all the varieties of throat trouble were Diphtheritic, why should this fear exist? If there was no foundation for it, why should it be so universal? The question had assumed such a form that the profession owed it, as a duty to their patients, and as a protection to themselves, to determine the exact nature of true, uncomplicated Diphtheria. The people had a right to demand, for their own peace and quietude of mind, that we tell them whether, or no, the disease is as they commonly regard it. Whilst the vast majority of professional, and non-professional persons recognized it as a terribly fatal disease, it was a matter of vital importance, that it should be known why many practitioners in the country, and even a few in our midst, had so many mild cases, and such an enormous percentage of cures. It

was not merely a question of individual intelligence and honesty, for the terrible suspense of parents and friends, the despondency and dread of patients, the firm footing of the medical profession itself, depended upon what disposition was to be made of the conflicting statements presented in the Academy, and all laying claims to truth and authority. The definite diagnosis of the disease, was of first and paramount value, if there was any possibility of any agreement. He would like to know from the gentleman, who called all throat affections Diphtheria, what disposal he made of the many grave symptoms, which are called by all systematic writers, the characteristics of the disease? Had he ever seen Faucitis, Tonsillitis, or Follicular Tonsillitis followed by paralysis? Why, if the gentleman's doctrine was true, instead of Diphtheria being a rare disease, we would have it from October to May every year, for it is well known to all practitioners that we have large numbers of such cases, being of the commonest occurrence from Autumn to Spring; and in all these cases we have redness of the fauces.

The speaker then described, at length, a case of faacial inflammation resulting from cold. The child had fever and headache, probably vomited; had some cough; some difficulty in deglutition, could not swallow without discomfort; tonsils enlarged; mucus folds of fauces reddened. The physician looks into its mouth, says: "We have here a case of Diphtheria," gives the child something, and in a few days it is up and running around, and there follows no anaemia; no muscular weakness; no paralysis! yet we had a case of Diphtheria. This trouble may recur again, and again, yet it is always Diphtheria, when every physician knows that there is nothing more common than inflammatory affections of the tonsils and fauces, and in all of them, particularly in children, they cause redness of the fauces, as also do all the acute pulmonary affections of children. These maladies constantly recur in the same person, yet the same gentleman calls Diphtheria a specific zymotic disease, when all that class of diseases exhaust the susceptibility of the system by one attack, and Diphtheria is no more liable to recur than is Scarlatina, Measles, Typhoid Fever, Idiopathic Erysipelas, or any other specific, essential form of disease. The recurrence of specific diseases might happen, but so uncommonly, that he could safely challenge any gentleman in the Academy to produce a case of the third appearance of Scarlatina, either in his own practice, or personally observed in the practice

of any other one. And he would say in regard to Dr. Flint's last edition on Practice, that after his very able description and idea of Diphtheria, it must certainly be a typographical error which makes him say, in drawing the differential diagnosis between Scarlatina and Diphtheria, that while the former disease occurs but once, Diphtheria may recur frequently. Analogically this could not be true, and positively in his observation it was not true; and it was some consolation to know that we could tell the parents that when a child has once passed through this fearful disease, there will be no return. It had not been many years since people were having Typhoid Fever every winter; but we have learned better, and if we were to call all sore throat Diphtheria, we might, in like manner, have many recurrences in the same winter.

He would tell the Academy why we have this great fear of Diphtheria—simply because it comes on insidiously, the child remaining on its feet the whole of the first stage, and would also during the second, if it had muscular strength; the child's health was being steadily undermined by the malady and we had no palpable evidence of its presence; there is no cough, no prostration, only some loss of appetite, and probably a general irritability. Sometimes the child is wakeful, starts in its sleep and these are to the inexperienced eye, the only symptoms during the whole of the first stage of the disease. What other malady had we like this? Certainly not Faucitis, Tonsillitis or Follicular Tonsillitis, for in all of these we had difficulty of deglutition or obstructed respiration. What other disease had symptoms like the following? At the beginning of the second stage a short infrequent hacking cough coming on; the throat difficulty increasing to a roughened cough; culminating in a muffled croupous respiration and still the child remaining on its feet and going about as usual. At this point the parents, if easily frightened will think of croup and send for the Doctor; if not, they will give some simple domestic remedy for a cold; presently the cough becomes so incessant that they are suddenly awakened to a sense of the danger and send at this too late period for the Doctor. They are astounded at his powerlessness in the presence of the disease and that a simple croupous cough should be so fatal a malady. Here we have a picture of those fatal cases which go to make the fearful character of the disease. With this understanding of the malady, it is an absolute wrong to the profession and an injury

to the people, that one or two physicians should go about saying, that they have large numbers of cases, frequent recurrences in the same person, and that they are easily amenable to treatment. How does the case stand? You have a proper appreciation of the severe character of the disease, you therefore caution families in regard to sending for you early. But they may be impressed by another's assertion that Diphtheria is a frequent and mild disease. The caution is relaxed and between being called too late and a careful ruling out, on your part of all throat affections which are not Diphtheritic, you have a very undue proportion of mortality. Another sees in every inflamed throat a case of Diphtheria, and in the treatment of which he has unlimited success, because, as has been said before, if we accept his interpretation for two-thirds of the year, Diphtheria would be the commonest of diseases. To illustrate the practical bearing of such wholesale irregular classification, he had heard of a case, who was cured eleven times in six or seven years, of Diphtheria. What were the obvious deductions from all this? Either that the few were infallible in the use of their drugs, or that the vast majority were mistaken in their ideas of the malady and its best mode of treatment. But he would challenge any member to produce any recent authority, supporting any such views and results as had been detailed in the Academy by some of its speakers. Flint, Condie and West are unanimous as to the severe character of the disease. The speaker took his seat after again reiterating that it was of the utmost importance as a duty to the people and a defense of the profession, that we definitely agree as to the nature of the disease Diphtheria."

In conclusion I wish briefly to correct some important errors in the report of my remarks, published in the May number of your Journal. Commencing in the third line from the bottom of page 286, should read, "when a marked *declination* of the eruption takes place succeeded by *desquamation*." Commencing with third line at top of page 287 read as follows: "General anasarca with or without ventral effusion, which comes on, etc." The second sentence of the second paragraph should read, "Should the patient convalesce from this stage, and doubt exist as to the character of the case, the Diphtheritic diagnosis would be confirmed by the subsequent occurrence of paralysis which differs, etc." In the eighth line from the bottom of same page, the word "healthy" should be omitted.

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

NEW OPERATIVE PROCEDURES FOR CATARACT.— COMPARISONS AND CRITICISMS. BY L. WECKER.

Translated by Wm. F. Smith, M. D.—Concluded from July.

C.—*Combined Extraction Without Opening the Capsule.*

This method of operation has been particularly in favor, lately, with M. M. Sperino* Pagenstecher and ourselves. M. Pagenstecher makes, as we have been convinced by observing some patients upon whom he operated at our clinic, an incision which falls in almost its entire extent, at a distance of one millimetre from the border of the cornea in the sclerotic; further, he makes the iridectomy very large and disengages the cataract with his scoop, by which he executes a slight movement of obliquity towards the angles of the wound in drawing it forth.

The scoop (Fig. 3,) which M. Pagenstecher uses for the extraction of the crystalline, is rather large, and is of easy management, only when the wound is situated entirely in the sclerotic. We proceed exactly as in the operation of Jacobson, the patient being completely under the influence of an anaesthetic, as far as the excision of the iris, which we make to the extent of about two millimetres in length. We then introduce our round flat scoop behind the posterior face of the crystalline. At first the scoop penetrates almost perpendicularly, but when it has passed the inferior border of the lens, we depress the handle and cause it to pass under the posterior capsule until the centre of the spoon corresponds to the posterior pole of the crystalline. During this introduction the finger which lifts the lid exercises a slight pressure on the superior border of the cornea so that the crystalline

* M. Sperino really has the merit of calling attention to his mode of operation, also used by others in Italy, and which M. M. Noyne, among others, have practiced there with success for a number of years. In order to be able to contest the matter with M. Sperino, it is necessary to ignore the communication which he made on this subject to *Congrès d'Ophthalmologie de Bruxelles*, (V. Comptrendu, 1857, p. 450,) under the title of *Simplification of the Operation for Cataract by Extraction.* Also the preparations which he there presented in the form of about twenty crystallines invested in their capsules which he had collected and very well preserved in a China vase. We would judge without doubt that this dish of lenses would be more than enough to establish the right of priority which we claim for him. It is true that M. Pagenstecher and his followers add the iridectomy to the heratotomy, and that M. Sperino omits this addition without appearing to lose anything in his general results.

can be luxated upwards. By a horizontal traction we make the extraction of the cataract, but at the same time the index finger pro-



Fig. 3.

gressively lowers the raised lid in such a manner as to maintain the lens in the hollow of the scoop and to prevent it from escaping laterally. When the diameter of the crystalline passes the wound the assistant holds himself ready to receive it in the scoop of Daviel. The statistics of M. Pagenstecher comprise sixty-three cases, from which he selects eleven as being complicated cataracts. Of the remaining fifty-two cases, two lost their vision from suppurative choroiditis of the vitreous humor. We turn for the determination of the acuity of vision to the memoir of our confrere and to the analysis that has been made of it by M. Delacroix, in the *Annales* (T. LVIII., p. 181.) We simply remark, being entirely of the opinion of M. Pagenstecher, that the procedure of which we treat gives, more often than any other $S=1$, but that it is an error to believe

that this result is exclusively reserved for this operation. Our friend Jaral has assured himself, at different times, that some of the patients operated upon by the procedure of Jacobson and of whom he willingly undertook to determine the astigmatism, also obtained, $S=1$, M. Pagenstecher insisted on this particular fact, that none of his patients required a secondary operation. We can say the same thing of ours. He speaks of only four cases in sixty-two, where extended opacities of the vitreous body developed themselves, whilst the ordinary slight opacities observed there, disappear from the third to the fourth week. Our own statistics comprise sixty-six cases of which one failed by partial suppuration of the cornea and consecutive phthisis,* one by glaucoma with intraocular hemorrhages from the retina, two by membranous opacities of the vitreous body, and two by subsequent retinal detachment, forty-five obtained very good vision, fifteen inferior vision but sufficient to permit them to go about and attend to their occupations. It is impossible

* The patient, aged 76 years, had both eyes operated on without the aid of an anæsthetic; with the right eye all went well, but on the left eye almost the entire length of the incision was made in the cornea; the capsule of the crystalline was ruptured at the moment of the extraction and the contusion of the wound such that the retention of part of the cortical masses was, very probably, the cause of the accident.

for us to indicate, in figures, the acuity of vision, and for the following reasons:

1st. A very large number of the patients left the clinic towards the end of the third or at the commencement of the fourth week, in order to return to their homes, and at this time, the irritability of the eye and the presence of opacities in the vitreous rendered the determination of the acuity of vision and of the proper glass to develop it, entirely incomplete. 2d. Evidently the number who can not read is greater among our patients than among those of our German confreres. We should remark here that in our statistics of sixty-six cases, rupture of the capsule occurred fifteen times at the moment of the exit of the lens, and that in these cases the heating process has been much more laborious and the result has been much less satisfactory in regard to the vision. We have become convinced that, *the more the patient is advanced in age and the older the cataract is (retrograde) the less the zonula resists, and the less there is of danger that the capsule will be ruptured.* Cataracts with very flimsy cortical masses having arrived exactly at maturity, are those which offer the greatest difficulties to complete capsular extraction. In commencing cortical cataracts and in cataracts of which the cortical masses are entirely disorganized (cataracts of morgagni), the resistance of the capsule is considerably to the advantage of the operation. That which has impressed us in the operative procedure of which we treat, and which has deterred us from following with our primitive ardor, a mode of operation so rational in appearance, are retinal detachments, and three cases where very late hemorrhages have taken place; in two of which numerous opacities were developed, which occupied the whole of the vitreous body; in the third, mentioned above, a loss of the eye occurred from glaucomatous complication. All those who have made the capsular extraction, in practicing the incision in the limbus conjunctivalis, affirm that in those cases where the operation was performed without the least accident, the healing process took place with marvelous rapidity, did not occasion the least irritability of the eye, and gave excellent results. But in those where the loss of the vitreous, ordinarily insignificant, has been a little greater than usual, at the moment when the cataract was drawn forth, more extended opacities of the vitreous body are seen to be developed, the eyes are predisposed to intraocular hemorrhages and, as we believe, threatened with ultimate detachment of the retina. The first patient in whom we observed this condi-

tion, was a coachman, aged 66 years. He had been operated on in 1866, without anaesthesia, and had made extreme pressure on the ball with the lids at the moment of the evacuation of the crystalline; consequently the loss of the vitreous humor was very great; the patient left the clinic four weeks after the operation, and although the vitreous body was the seat of numerous flocculent opacities, especially in its inferior part, and near to the wound, he read No. 8 of Jæger.

I saw the patient again, three months afterward, and was painfully surprised to find that he could merely count fingers with this eye; all the inferior part of the retina was detached, and the subretinal exudation was not sensibly diminished after a puncture made in the retinal sack, with a lance shaped knife. Since then the patient has had the operation performed on the other eye with complete success, by the procedure of Jacobson, but this time with anaesthesia. The second patient operated on in 1867, (without anaesthesia), was a druggist, aged 62, with a retrograde capsular-lenticular cataract. The patient was very well behaved, and did not loose the vitreous when the lens was withdrawn with the scoop; but before the bandage was adjusted, and at the moment when the lid was raised for the inspection of the wound, an unfortunate contraction by the patient caused a small quantity of vitreous to escape. The healing process progressed with much rapidity; he read No. 4 of Jæger, and the vitreous body was the seat of only a few thin filamentous opacities. The twenty-fifth day I was called to see him in great haste; the patient who had shaved himself in the morning, having sneezed twice with much violence, perceived, at the time of his exertion, that the vision of the eye operated on had disappeared quite suddenly. I discovered a detachment which extended over more than the inferior half of the retina. M. Knapp has published, through his assistant, M. Bergmann,* statistics comprising thirteen cases; we think we can insist upon disregarding them in our consideration of extraction, seeing that the operative procedure was evidently defective. M. Knapp has made the extraction through an incision performed upward with Graefe's knife, on patients not under the influence of an anaesthetic, and in the thirteen cases, has observed seven ruptures of the capsule. However, these conclusions relative to the application of the procedure, according to the nature of the

* Archiv fur Ophth. B. XIII, A. 3, p. 383.

cataract, differ but little from those we have cited above. We say therefore, in conclusion, that this operative procedure gives marvelous results as to the acuity of vision; but that it is objectionable under two considerations—that the operator, however expert he may be, can never affirm that he will regularly execute the procedure, (without rupture of the capsule), and that according to the best attested statistics, a lesion of the vitreous body causes the organ operated on to undergo dangers at a stage where the other operative procedures for extraction, not comprising the attempt at extraction of the lens invested by its capsule, cease to exercise an injurious influence. It is designedly that we do not conclude this article with a series of conclusions which, perhaps, would have the demerit of being premature. Not *theoretical reasonings*, but *well ascertained results* should decide an operator to adopt a new procedure, and abandon another which he has for a long time practiced. We have limited ourselves, therefore, in calling the reader's attention to three principal methods of operation actually followed, being happy to be able to offer, for each of them, a number of facts of sufficient weight, to serve as data for important statistics. *The publication of results obtained by such a method, without the knowledge of what the future reserves for each of them, is always useful instruction, and we are persuaded of this so much the more, as it is not common in our time to see an operator adopt numerous new operative procedures without good reasons for doing so.

Inflation of Tympana.

BY A. D. WILLIAMS, M. D., Cincinnati.

Without stopping to give the history of inflation, I will pass at once to the consideration of the *modus operandi*.

The necessary instruments are three: 1. *The Otoscope.* 2. *The Eustachian Catheter.* 3. *The Balloon for blowing purposes.* The Oto-scope is simply an india rubber tube of small size, about two or two and a half feet in length. One end is placed or stuck into the patient's ear, the other is placed in the operator's ear, so that it will hang without being held. Sometimes the patient will

* We have hesitated to express an opinion as to the procedure of combined linear extraction, since the number of our cases (50) is relatively small; but this hesitation has disappeared in the presence of the fact, that the results are perfectly in accordance with those of our venerable preceptor and friend, M. Arlt.

have to hold the end in his ear, particularly where the external meatus is quite small. The Otoscope is sometimes furnished with bone or ivory ends; this, however, is not necessary. It is only a matter of cleanliness. The physician should always use the same end.

The object of the Otoscope is to enable the aurist to auscult the ear as he blows the wind into it. This he can do just as easy as the physician auscults the chest with the Stethoscope.

The Eustachian Catheter is a gutta percha or silver tube (the silver are much the better), of various sizes, generally three, so as to suit the age of the patient in general, and the size of the nose caliber in each particular case. We frequently have to use the smallest size on grown persons. The medium size will most nearly suit all persons. It must, of course, be long enough to reach from the point of the nose to the mouth of the Eustachian tube in the throat. The outer end should project from a half to an inch from the apex of the nose. The inner end of the Catheter is bent slightly upon itself, about one half inch from its point, so as to make it enter the mouth of the tube readily. The outer end is supplied with a ring which stands so as to show, at a glance, the direction or position of the inner bent end. The Balloon is so named because of its shape. It is simply a *No 2 Goodyear's patent syringe*, with its point sawed off and sharpened. A small round hole should be made in the base of the balloon, so as to make it fill easily. In Germany they have balloons made expressly for inflating; but the above named syringe answers the purpose just as well as any thing I ever saw there.

Having thus briefly described the instruments, we must now give somewhat in detail the *modus operandi*, the way in which they are to be used.

Seat the patient in a chair, and in front of something against which he can rest his head; the wall answers the purpose very well. Some of the German aurists advise us to inflate the ear, always with patient standing. This, to say the least of it, looks very awkward, and particularly so with ladies. I always have the patient sit. Place another chair to the front and left of the patient, but close to his chair; it should be a little higher than the patient's. Having supplied himself with the necessary instruments, the operator seats himself upon this second chair, and places his feet to the left of the patient. Having explained the nature of the operation, in a few words, with the assurance that

it will not be *painful*, but *exceedingly unpleasant*, he proceeds to place the Otoscope as above directed. He then takes the Catheter between the index and second fingers, with the body of the instrument resting on the back of the rest of the fingers. Taking care always to hold the Catheter *loosely—never grasp it*—he inserts it, as it were, *back-handed* into the nose, raising, at the same time, with the thumb of the left hand the end of the nose, so as to let the Catheter enter easily. At first the point of the Catheter must be directed decidedly upward, until it passes over a little eminence, that is always present in the floor of the orifice of the nose, then suddenly raised to a horizontal, and moved slowly, and gently along the floor of the nose, till the end passes over the soft palate into the cavity of the throat. As a rule there is no difficulty in thus inserting the Catheter. Care must be taken, however, never to do violence to the mucous membrane of the nose. If obstacles are found, the Catheter must be loosely held, and its point allowed to hunt its way through. Sometimes we have to let it turn clear over before it will pass in. What must be remembered is, *never use force*. If it will not go without it, it had better not go at all. It sometimes happens that the point of the Catheter passes up among the turbinated bones, instead of along the floor of the nose. This must be strictly guarded against; for in that position it can never be brought into the mouth of the Eustachian tube. After the point is passed over the soft palate, it must be turned into the mouth of the tube. This is easiest done by feeling for it with the Catheter. The opening of the tube lies a *little* above the level of the floor of the nose, and a little back of the point where the Catheter can be felt to slip over the soft palate. Up to the time the instrument is felt to slip over the soft palate, the direction of its point is downward. After it is once in the throat, in order to make it enter the Eustachian tube, its point must be turned horizontally outward, and, sometimes, a *little* above the horizontal. Its exact direction will be always indicated by the ring externally. Knowing about where the tube ought to be, we can guess at its position, and after a little practice can usually strike it at the first effort. If we miss it, then we have to feel for it by moving the instrument back and forth.

From the feeling we must judge whether the Catheter is right or not. For instance, if the end of the Catheter is in the mouth of the tube, we can not turn it beyond the horizontal, or very little above it. We feel that it comes solidly against the upper

wall. So, also, can we feel the anterior and posterior walls. In this way we must tell when we have got the Catheter in position. If we pass it too deep, beyond the mouth of the tube, it comes into what is called, the fossa of Rosenmuller, and gives very much the same kind of feeling. Its deep position will enable us to tell that it is not the Eustachian tube.

Without stopping here to give the different methods of introducing the Catheter, (I practice the above method, and think it the best), and supposing that the instrument is correctly introduced, I pass on to consider the third and last part of inflation which consists in blowing the wind into the tympanum. Resting the left hand upon the forehead of the patient, by means of the little and ring fingers, and holding the Catheter in position with the thumb and second fingers, I take the balloon in the right hand, introduce its nozzle into the outer end of the Catheter, and then press it with force enough to drive the air into the cavity of the tympanum. Having previously adjusted the Otoscope, the noise of the wind in the tympanum will be distinctly heard, which is positive proof of the correct introduction of the Catheter in the first place, and of the permeability of the Eustachian tube and free condition of the tympanum in the second place. In pressing the balloon, great care must be taken not to shove the hand forward at each puff. This natural shoving disposition, on the part of the operator, is the source of greatest pain to the patient. Every one must, therefore, guard against it.

The ball of the thumb must always be made to come upon and cover up the little hole made in the base of the balloon, and thus prevent the air from escaping backward. It is then raised, and the balloon fills from without. I have thus briefly gone through with the different steps in the operation of inflation, and wish to refer to some things in connection with it, under the head of

GENERAL REMARKS.—All who attempt inflation must know where the mouth of the tube is to be found. This implies a good knowledge of the anatomy of the parts concerned. This knowledge must be obtained from the dead subject. Considerable tact and some little experience, is necessary to enable a person to inflate an ear readily and comfortably. The profession looks upon it as a difficult thing, and very few undertake it. The difficulty lies more, perhaps, in the *disinclination* of the physician to undertake it. Every medical man could do it, if he would muster a little courage, and try it. “If at first you don’t succeed, try, try

again," should not be discarded from the pages of the *little book* and forever forgotten. There is too good a lesson in it to be lost.

As the air enters the tympanum, the operator must *auscult* the ear, and make out his diagnosis, whether there is obstruction in the tube, or whether the drum is filled up with mucus or pus, or whether it is entirely free. The inflation will enable him to do this. It is, therefore, an important means of diagnosis. I can not give an idea of all the sounds a person would hear in the various conditions of the drum. This must be left to the good judgment of every individual. The noise heard in a healthy ear is a *gentle blowing*, which seems to be near the operator's ear; not so far off as the patient's ear. This blowing is modified in every conceivable way to suit the particular diseased condition. The blowing must not be too hard, yet sufficient to drive the air into the ear. *Never use violence.* The Catheter must not be held *tightly*, but *loosely* in the fingers, which is much less painful. *Never squeeze the margin of the nose between the fingers and the Catheter.* This is *excessively* painful. Sometimes it is necessary to move the point of the Catheter, a little, in various directions, so as to free it from the folds of the mucous membrane about the mouth of the tube, before the air will enter. Other times, where there is considerable obstruction in the tube, it will enter only when the patient swallows.

The only accident that can happen in inflating the ear, is where there is ulceration, or abrasion of the mucous membrane, and the air is forced through into the cellular tissue, giving rise to what is called *Emphysema*. This generally makes its appearance under the skin, beneath the ear, and may extend down over the throat. The air can be felt under the skin, and the patient will, perhaps, hear it crack when the jaw is moved. This will alarm him considerably, but in itself is a very small matter, as it will pass off in twenty-four hours. Where the emphysema is considerable, it will cause an ugly swelling about the neck. If the wind gets into the soft palate and puffs it up very much, it may give rise to symptoms of suffocation. The physician can relieve these at any time, by pressing the soft palate up from the epiglottis with the finger. If he can not press the air out, as it comes in, then he must make several punctures into the palate, and press it out through them. This will give permanent relief. Under such circumstances the fears of the patient must be allayed, by assurances of no danger, from the physician, at the same time explain-

ing the cause of the trouble to him. Emphysema, however, will very rarely happen, and in an ordinary degree is perfectly harmless. I have caused it in the last two years about four times, but to a slight extent. All passed off in twenty-four to thirty-six hours. Of course, where this has happened once, it is not advisable to repeat the inflation in the same ear soon afterward, for it will most certainly take place again.

The general indications and uses of inflation, have been referred to, heretofore. I will not repeat them here.

The length of time it should be continued at each sitting, must be left to the judgment of the doctor. Generally speaking, a few puffs, after the air once enters freely, will be sufficient.

After the inflation, the patient's ear may feel a little full for a short time, but this passes off very soon. During, and after the inflation, the patient may complain of more or less dizziness. This will likewise pass off soon.

This closes the series of articles published, during the last twelve or eighteen months, on the diseases of the ear. I have made them as *practical* as possible, and as brief as I conveniently could. Asking pardon for the *dry things*, and trusting that they may have been of some service in some way, I promise not to trouble the readers of the *Lancet and Observer*, soon again with the details of this subject.

Correspondence.

[The following communication is the first of a series of which this may be regarded introductory. We think our readers will welcome these articles.]

Medical Chemistry.

While every medical school has its Professor of General Chemistry and recognizes its importance by providing the apparatus and reagents necessary for the demonstration of the facts, and principles of the elementary Chemical Science, verey few of our institutions make any provision enabling or requiring our students to become *practically* educated even in the merest elements of the science; and still less in those departments most essentially related to the science of medicine and surgery. Very few schools recognize such a department as *Medical Chemistry*.

either theoretical or practical, and yet no department will yield a larger dividend to either the college or its alumni. So thoroughly convinced of this fact are the schools and students who have taken a pioneer step in this direction, that they would as soon, nay rather, dispense with almost any other chair. Certain preparatory educational qualifications are required for admission into all our medical colleges, not because they are considered a *part* of a medical education but because they are an indispensable *means* to a certain *end*. Would it not be every whit as rational for us to establish in every medical college a Professor of Languages and then stop there requiring no oral or written drills, examinations or theses, as to have a Professor of General Elementary Chemistry and go no further than this, requiring of our graduates nothing more nor less than the same identical chemical education that we would recommend to our dyers, distillers and manufacturers generally? If the elementary or the applied science must one or the other be omitted in a medical collegiate course, had it not better be the former, letting it come in as a preparatory qualification, so that the time of the course can be devoted to its *practical* application in medicine? But there is no need of dispensing with *either*. A certain moderate proficiency in the practical chemistry, both general and medical, can and should be one of the conditions of graduations. It is not incompatible with the circumstances of any school or student otherwise successful. While medical colleges are generally moving in the way of reform it is ardently hoped that this subject among others will not be overlooked. Let every school provide itself with the necessary means of putting this advantage into practical operation, and they will prove highly remunerated to all concerned. The physician who has even a moderate degree of proficiency in this line, is in possession of advantages second to no other item of qualification. To him formulæ and processes are matters of convenience not of necessity. He is independent, if he choose to be so, of careless, incompetent or dishonest apothecaries. Phenomena that reveal nothing to others or give rise to nothing but trouble or perplexity, may be to him the finger-board that shall point him not only to the means of saving lives that might otherwise be lost, but also to that goal of every noble-minded physician's ambition, a high degree of success and well merited eminence. Practical pharmaceutists also well know that their *reliable* preparations find their way into the hands of those who know

enough of chemical tests to protect their own interests. A *very* large portion of the drugs dispensed and prescribed by regular physicians and others, are only mere compromises of what they should be, sufficient to gratify the wishes but not to supply the wants of those who use them. Now, whenever those who use or prescribe medicines under their own personal responsibility are sufficiently posted in practical tests to protect themselves from imposition; then, and not until then, will reliable drugs be the rule instead of the exception. The amount of actual chemical knowledge obtained and retained by medical students who graduate without any course of practical drill, amounts necessarily to just about nothing at all. Perhaps a majority retain a vague remembrance of elements, equivalents and even some of the general laws of affinity; but what is their knowledge more than a mass of verbiage. Though they may have been naturally students of the highest capacity and may have attended the finest and ablest of lectures, still they find it about like learning to swim without going near the water. No wonder the value of chemical science is underrated even by the medical profession. It is one of those things that can be appreciated only as they are understood.

J. B. HOUGH, M. D.

Editor's Table.

COLLEGE ANNOUNCEMENTS.—About these times medical students are casting about in their minds the relative advantages of Colleges, and deciding the proper place for their next winter's course of instructions. In the present number of this Journal, several cards are to be found which will aid the judgment in this matter. We respectfully suggest to students, that a few dollars are not to be counted when these are balanced by peculiar advantages for acquiring medical knowledge. The student needs instructors, "apt to teach," capable of imparting instruction. A school should be selected having ample clinical advantages, and by no means, least, the student desires properly to select a school of whose reputation he need feel no distrust of shame, when in the future he looks back to his alma mater. Without making invidious comparisons, we are very sure all these are to be met in the city of Cincinnati.

A NEW MEDICAL JOURNAL.—Drs. Warren and Chancellor of the Washington University, of Baltimore, will issue the first number of a new Journal, to be known as the *Baltimore Journal of Medicine and Surgery*, on the 1st of October next.

DUBLIN QUARTERLY JOURNAL.—This is one of our most valuable exchanges. The number for May, of the present year, is received, and contains most capital papers, several of them elegantly illustrated. We wish the publishers would forward to us, Nos. 75, 79, 80, and 84, which we need to complete our file, regularly, since we commenced the exchange.

DEMING'S LIFE OF GRANT.—Some time since we noticed the advanced sheets of a life of Gen. Grant, by Henry C. Deming. The work is now issued, and makes a handsome, very readable book of 500 pages. The National Publishing Co., of this city, are pushing the book, and their agents have it on sale. There is a good engraving of the General, and a view of his log cabin birth place.

UNIVERSITY OF MICHIGAN.—The storm of professional wrath has been too much for the Regents of the Michigan University. The Supreme Court of that State has decided that the attempt to establish the homeopathic department at some other place than Ann Arbor, does not fill the intention of the Legislative enactment, whereby the University was to receive pecuniary aid, on condition of establishing this chair. The Regents have, therefore, finally receded from their action in the matter, and decline to accept the benefaction upon the conditions provided. The vacant chairs have been filled, and again all is lovely. It remains to be seen how far this agitation will affect the reputation and classes of the medical department.

CINCINNATI COLLEGE OF MEDICINE AND SURGERY.—This Institution recently closed its twenty-fourth session. The commencement exercises, June 26th, granted the degree of M. D., to thirteen graduates. There were twenty-seven matriculants. Rev Dr. Lilienthal, as President of the Board, delivered the diplomas

accompanied by an appropriate address. Prof. Bramble gave the Valedictory. Dr. Thomas Carroll has been appointed to the chair of obstetrics, to fill the vacancy made by the resignation of Dr. Buckner.

UNIVERSITY OF LOUISVILLE.—Profs. Rogers, Yandell, and Powell, have resigned their professorships in the University of Louisville.

BRAITHWAITE'S RETROSPECT.—Part 57, for July, is received, and contains the usual valuable practical variety. It is published by Townsend & Adams, of New York, for \$2.50 a year, in advance.

To SUBSCRIBERS.—The prompt manner in which most of our subscribers have responded, renders it unnecessary for us to repeat the urgent request of last month, in regard to payments. We need money—its the *oil* which makes the machinery of a Medical Journal work smooth and ready. But still we are happy to say to our friends, that our list is all the time, steadily, quietly growing, and our cash book tells us that our receipts, at the end of July, 1868, are several hundred dollars better, than at any time corresponding heretofore. We work hard to make a good practical journal, but expect our subscribers to render the *quid pro quo*—that is only reasonable. In the meantime, we acknowledge our indebtedness to a subscriber, who is in a "quandary." He is a post master—can not very well *remit* without the knowledge of the post master—and after our ill-natured fling at post masters, what is he to do? We fairly own up, but have privately suggested the remedy.

RENNSELAER Co., (N. Y.) MEDICAL SOCIETY.—We thank the Secretary, who has kindly sent us this manual. It goes back half a century in its records. We have in chronological order the membership since 1820; so, too, the entire list of Presidents, the present active membership, the by-laws, and code of Ethics.

"DR. C. T. SCUMAN, who was tried in the Criminal Court at Cincinnati, recently, and found guilty of malpractice, in producing

abortions, has been sentenced to pay \$500, and sent to the city jail for thirty days."—*Phil. Reporter.*

We don't know what our esteemed neighbor of the *Reporter* means by "malpractice" in producing abortions, though we suppose the recent butchery on Ninth street, was of this character, if there is any distinction in this branch of the fine arts. There must be some mistake, however. There is no Dr. Scuman, regular or defective, in Cincinnati, and no such case has been before our Criminal Court. And, finally, should we happen to convict a doctor of this crime, the punishment in this State, very properly, is the penitentiary, not the city jail.

A FAMILY DISTURBANCE.—Two prominent gentlemen of the Medical College, of Ohio, engaged in a controversy, which, if it does not import "coffee and pistols for two," is certainly grave and threatening. These are hot days, and we trust our friends will do nothing to heat the blood unduly. For particulars see *Medical Repertory*.

USE OF PAPER FOR SURGICAL DRESSINGS.—Dr. Addinell Hewson (*Penn. Hosp. Reports*), struck with the fact that paper had been used in the place of lint as a surgical dressing, in the recent campaigns of the Prussian army, tested its practability at the Pennsylvania Hospital, and, after numerous experiments, has settled on the common newspaper as being the best and cheapest substitute for lint, linen rags, or muslin.

The advantage of economy is no small consideration, as a yard of good patent lint costs thirty-three cents, while a sheet of paper which equals that article in usefulness as a surgical dressing, costs only one cent.

Dr. Hewson uses also Manilla paper coated with a thin layer of yellow wax, in the place of oiled silk. In this way a saving of from four to six hundred per cent. is gained; besides affording the advantage of discarding everything appertaining to the dressings each day, by which one source, at least, of renewing contamination experienced in the employment of oiled silk is avoided.

O'REILLY PRIZE.—Dr. John O'Reilly, of New York, having offered, through the N. Y. Academy of Medicine, a prize of six hundred dollars for an Essay on the Physiology and Pathology of

the Sympathetic or Ganglionic Nervous System, the Committee of Award, appointed by the Council of the Academy, have adopted, with the concurrence of the Council, the following regulations: 1. The competing Essays shall be sent in to the Chairman of the Committee, Prof. J. C. Dalton, M. D., No. 101 East Twenty-third street, New York, on or before the first day of March, 1869. 2. Each Essay shall be marked with some distinguishing device or motto, and accompanied by a sealed envelope bearing the same device or motto, and containing the name and address of the writer. 3. The Essay selected by the Committee shall be transmitted by them, together with its accompanying envelope, to the Council of the N. Y. Academy of Medicine, under whose direction the envelope shall be opened, and the name of the writer announced at the first meeting of the Academy in May, 1869. 4. This prize is open for universal competition. 5. The Committee have a right to reject whatever does not come up to a proper standard of merit.

Alfred C. Post, M. D., President of the Academy, *on behalf of the Council.*

Committee of Awards.—J. C. Dalton, M. D.; A. Flint, Jr., M. D.; Alfred L. Loomis, M. D.

MARRIED, June 29th, 1868, at Galien, Mich., Dr. James F. Bowers, to Miss Blanche G. Smith, by the Rev. Mr. Patterson, assisted by the Rev. George Blacksey. Our sincere good wishes attend the doctor.

Reviews and Notices of Books.

Report of the Metropolitan Board of Health, New York, for the year 1867.

This report for the past year, although not so voluminous as its predecessor, which we reviewed a year ago, is distinguished by the possession of the same qualities. It contains not only full information upon the causes of disease, but also valuable suggestion for promoting the physical well-being of the whole population.

The Sanitary Inspectors report an "improved feeling"—to borrow a term from the brokers—in the public estimate of their sanitary labors, and instead of being opposed they are now afforded every facility in their investigations. "Their visits," says Dr. Dalton "are no longer looked upon with distrust and suspicion, as in some cases they were at first. * * * While in the early days of their work, information was given to these officers most grudgingly, and the materials for their reports obtained only after the most disagreeable and sometimes dangerous experiences; now they are welcomed, and treated with every respect and courtesy."

The report of the President of the Board, Jackson S. Schultz to the Governor consists of a "general review of the proceedings of the board, from November 1, 1866, to October 31, 1867." This is followed by the Report of the Sanitary Superintendent, Dr. E. B. Dalton, which is chiefly occupied by the administrative details connected with his department, and with the sanitary condition of tenements and slaughter houses. The most important part of the volume, both in respect to material and length, is the report of Dr. Elisha Harris, the Registrar of Vital Statistics. The following plan, exhibits the thoroughness with which the subjects embraced in Dr. Harris' department are treated:

- "1. A general summary of deaths, births, marriages and population.
2. Summary statements of the vital statistics of each successive quarter, or season of three months, with explanations and remarks.
3. The consolidated abstracts of marriage, of births and still-births, of deaths meteorological observations, zymotic diseases and other preventable causes of death, vital statistics of hospitals and public institutions.
4. Review—Conclusion."

This portion of the volume is accompanied by elaborate diagrams showing the course of the total mortality and the chief diseases for fifteen months, with the meteorological observations for the same period; the total deaths of infants under one year of age and the rates of deaths to total living population at the several ages; and with maps showing the localities of cholera and fatal diarrheal diseases.

In making up statistical tables to show the movement of the population, Dr. Harris experienced the greatest embarrassment in the erroneous census returns. To exhibit the birth, marriage

and death rate, it is, of course, necessary to know what is the population of the metropolitan district.

"The public Registers in New York show that in the last twelve months the marriage rate exceeded twenty persons to the thousand. But at the same time it appears that in Brooklyn the *registered* rate is less than half that in New York. Yet we have abundant testimony to prove that the actual marriage rate is higher in Brooklyn than New York."

The bureau of vital statistics is in possession of returns of 12,569 births for New York, and 4,878 for Brooklyn. "This it is supposed does not exceed forty per cent. of the number of births which actually occurred in those cities." Is there a decrease in the birth rate? This is a question now much agitated. Dr. Harris gives us much statistical information on the point. He shows by the death rate of infants under one and two years of age, "that the total number of children born in these cities every year cannot differ much from the pro rata of births to total population in other great towns." This conclusion is further supported by the ratio which the total number of children under five years of age bear to the whole population. The percentage of children under five years of age to total population is:

For Brooklyn.....	13.52
For New York.....	13.08
For England.....	13.06.

"These statistics and other means of information prove conclusively that bad as may be the moral and social condition of the great commercial emporium of the continent, it is not becoming depopulated, nor have all the wives and mothers in New York yielded to the shameful and murderous practices of the abortionists."

"The death rate in the county of New York, in the twelve months ending September, 1867, was 32.27 to the 1,000 inhabitants, the census of 1865 being the basis for stating the total population of the county. * * * The death rate in Brooklyn for the same period was 34.48 per 1,000."

Beside these statistics of the death rate the report gives full information upon the comparative healthfulness of the various wards, and an elaborate analysis of the causes of the mortality in each. Dr. Harris, also, in the section entitled "Notes on the Chief Causes of Death," discusses many interesting sanitary questions in respect to Small Pox, Measles, Scarlatina, Diphtheria,

Fevers Pyemia, the Diarrhoeal Diseases, Phthisis and other preventable diseases.

These extracts will give the reader an intimation of the vast fund of information contained in this volume. It would be impossible, in the limits to which we must confine this notice, to do more than this. Those who can procure the work, will see that our high estimate of its value is well founded. The influence for good which it must have upon sanitary affairs, is not confined to New York, but will continue to be felt in all parts of our country, as, indeed, the previous labors of the Metropolitan Board of Health have been.

R. B.

On Diseases of the Skin. A System of Cutaneous Medicine. By ERASmus WILSON, F. R. S., seventh American from the sixth and revised English Edition. With twenty plates and Illustrations on wood. Philadelphia: Henry C. Lea, 1868.

No authority on cutaneous medicine is better known amongst general practitioners in this country than Wilson. We have repeatedly noticed the work before us, as successive editions have appeared, and at present there seems little called for but to announce that the American publishers have issued the present carefully revised editionm, ebracing twenty beautifully colored lithographic plates, illustrative of the principal forms of skin disease, together with other illustrations on wood. There is also some fuller details in the text descriptive of syphilitic affection of the skin. In other respects we do not note any material difference between this and the last edition, issued only a year ago. We can heartily commend the book as a convenient and satisfactory authority for physicians. For sale by Robt. Clarke & Co.

Therapeutics and Materia Medica. A systematic treatise on the Action and Uses of Medicinal Agents, including their description and history. By ALFRED STILLE, M. D., Professor of the Theory and Practice of Medicine, &c., in the University of Pennsylvania, &c. Third edition, revised and enlarged. In two volumes. Philadelphia: Henry C. Lea, 1868.

The work of Prof. Stille, has rapidly taken a high place in professional esteem, and to say that a third edition is demanded and now appears before us, sufficiently attests the firm position this treatise has made for itself. As a work of great research, and scholarship, it is safe to say we have nothing superior. It is

exceedingly full, and the busy practitioner will find ample suggestions upon almost every important point of therapeutics. We find in the present edition that several subjects are introduced for the first time; thus we find sections on *Chromic Acid*, *Permanganate of Potash*, *the Sulphites*, *Carbolic Acid*, *Nitrous Oxide*, *Rhigolene*, *Calabar bean*. Some parts of the work have also undergone careful revision, so as in some cases almost to afford new articles.

No classification of the *materia medica* has as yet been suggested that is free from serious objections. Dr. Stille is amongst those who base their system upon the physiological action of medicines; we think this is the most natural, and as a basis of instruction to medical students we believe it to be the best adapted. We cannot entirely agree with our author in his subdivision, nor in all cases, the groups into which he places some of the individual articles, still we are not disposed to be over critical. The general and particular arrangement is well, and the student and practitioner will alike find it well adapted for study or reference.

The publisher has presented us with the present edition in excellent style—good letter press, clear type, and good substantial leather binding. For sale by Robt. Clarke & Co. Price \$12

Materia Medica for the Use of Students. By JOHN B. BIDDLE, M. D., Professor of *Materia Medica*, etc., in the Jefferson Medical College of Philadelphia. Third edition enlarged, with illustrations. Philadelphia: Lindsay & Blakiston, 1868.

This elementary work by Prof. Biddle, is mainly intended as a hand book for the student, and for those busy in lecture season, it will be found convenient. It aims to give in the present edition, notices of the various new remedies and modes of applying agents. It has a number of good illustrations of medical botany, and is well printed by the publishers, Lindsay & Blakiston. In aiming to be very elementary we think the author has condensed too much, so that we fail to have a full outline of the subject. It will serve, doubtless, as a convenient text book for students following the course of instruction in the Jefferson College. For sale by Robt Clarke & Co. Price, \$4.

The Neuroses of the Skin, their Pathology and Treatment. By HOWARD F. DAMON, A. M., M. D., Fellow of the Massachusetts Medical Society, etc. Philadelphia: J. B. Lippincott & Co., 1868.

Dr. Damon proposes a new classification of skin diseases, leav-

ing out of view the syphilodermata which our author refers to writers on syphilis proper, he arranges the following classes:

- I. Neuroses of the Skin.
- II. Functional diseases of the Cutaneous Glands.
- III. Inflammations of the Skin.
- IV. Structural Lesions of the Skin.

The present monograph treats of the affections which belong to the first class. Embraced in this division we have *Hyperesthesia*, including Dermalgia, Prurigo, Uticaria, Zoster and *Anesthesia*; the whole concluding with a group of cases from actual practice. The book is beautifully printed on heavy tinted paper, and when complete the whole will make a desirable addition to our cutaneous literature. For sale by Robt. Clarke & Co.

Lectures on the Diagnosis and Treatment of Functional Nervous Affections. By C. E. BROWN SEQUARD, M. D., F. R. S., etc. Part I. Physiological Pathology, and General Therapeutics of Functional Nervous Affections. Philadelphia: J. B. Lippincott & Co., 1868.

The present monograph is only the first part of a series upon this subject. The careful study of the pathology of disease of the nervous system, has wonderfully developed our knowledge of this subject within the past fifteen years; and as our author thinks there is rather a tendency now to refer various affections to the influence of the vaso-motor nerves, of which these nerves may be entirely innocent. Dr. Brown Sevard therefore desires to definitely fix these relations of cause and effect, therefore in these lectures he proposes to give a practical history of the diagnosis and treatment of neuroses founded upon clinical observation, enlightened by physiology and experimental pathology and therapeutics. The lectures will be grouped into three parts, each of which will be complete in itself; we have before us the first part relating to general remarks on the causes, diagnosis and treatment of neuroses; the second part will treat of the history of each of the pure functional nervous affections; and the third will treat of the vaso-motor and nutrition neuroses, and of functional nervous affections due to syphilis or to rheumatism, to diseases of the kidney, the liver, etc., or to alteration of the blood.

The patient investigations which our author has made for so many years in this field of study, will secure for these monographs the attention and interest of the profession. For sale by Robt. Clarke & Co.

Obituary.

DR. WILLIAM THOMAS GREEN MORTON, who so long and earnestly laid claim to the discovery of the uses of ether as an anæsthetic, died July 16, in New York City, a victim to the excessive heat. He was born in Charleston, Mass., August 19, 1819; worked on a farm during his younger days, and next went into business, a part of the time, we believe, in this city, but met with very poor success. He then studied dentistry, and began the practice of the profession in Boston. The pain inseparable from operations on the teeth, led him to study means for its diminution. The result of his investigations was his administration of ether to a patient, and the extraction of a tooth unknown to the subject. How much we are indebted to Horace Wells, of Hartford, and to Dr. C. T. Jackson, of Boston, for suggestions in regard to the uses of ether, we will not pretend to say, as we have no desire to enter into a contest which has been waged for years. He was indefatigable to the last in urging his claims, and his persistency, doubtless, injured, in some cases, his popularity. He was a man of singular energy, self-confidence, and independence, and whether posterity shall allot him undivided honors in regard to anæsthetic agents, it will not withhold from him the merit of first solving, by actual experiment, the problem of their virtues.

DR. THOMAS C. BRINSMADE, an old and highly-esteemed citizen of Troy, New York, died suddenly, on the evening of the 22d inst., of disease of the heart, while presiding at a public meeting called to aid the Rensselaer Institute. He was Vice-President of the American Medical Society, President of the State Medical Society in 1857, and was one of the delegates to the Paris Scientific Congress in 1867. He was sixty-five years old.

Died suddenly, in Boston, April 17th, 1868, aged 74 years, John Homans, M. D., one of the most highly esteemed, respected, and useful physicians of that city.

IN New York, April 26th, 1868, Isaac Wood, aged—years, a much honored, upright, valued practitioner.

IN New York, April 7th, 1868, John P. Batchelder, in the eighty-third year of his age. Dr. B. formerly occupied the chair

of Anatomy in Castleton College, Vermont, and subsequently that of Surgery in the Medical School at Pittsfield, Mass. For the last quarter of a century he resided in New York where he was much respected, and was at one period, President of the Academy of Medicine.

IN Philadelphia, June 11th, aged 80 years, Nathan Shoemaker, M. D. Dr. S. had for some years retired from the active duties of the profession, but at one time he enjoyed an extensive practice, especially as an accoucheur, and was universally respected for his skill and high moral character.

MESSRS. BRACHMANN & Co., have removed their extensive store of choice liquors to the new building, Nos. 245, Third St. Those who desire to get a good article, and deal with clever gentlemen, will bear this new store in mind.

BELLEVUE HOSPITAL MEDICAL COLLEGE—NEW YORK.

SESSION OF 1868-'69.

Faculty:

Isaac E. Taylor, M. D., Emeritus Prof. of Obstetrics and Diseases of Women and Children, and President of the College.

James R. Wood, M. D., LL. D., Emeritus Prof. of Surgery.

Frank H. Hamilton, M. D., Prof. of Practice of Surgery with Operations.

Lewis A. Sayre, M. D., Prof. of Orthopedic Surgery.

Alexander B. Mott, M. D., Prof. of Surgical Anatomy with Operations.

W. H. Van Buren, M. D., Prof. of Principles of Surgery with Diseases of the Genito-Urinary System.

Benjamin W. McCready, M. D., Prof. of Materia Medica and Therapeutics.

George T. Elliot, M. D., Prof. of Obstetrics and Diseases of Women and Children.

Fordyce Barker, M. D., Prof. of Obstetrics and Diseases of Women and Children.

Stephen Smith, M. D., Prof. of Descriptive and Comparative Anatomy.

Austin Flint, M. D., Prof. of Principles and Practice of Medicine.

R. Ogden Doremus, M. D., Prof. of Chemistry and Toxicology.

William A. Hammond, M. D., Prof. of Diseases of the Mind and Nervous System.

Austin Flint, Jr., M. D., Prof. of Physiology and Microscopy, and Secretary of the Faculty.

The Preliminary Term will open on Wednesday, September 16, 1868, and will continue until the opening of the Regular Session, October 14, 1868. A distinctive feature in the method of Instruction, in this College, is the union of Clinical and Didactic Teaching, and all the Lectures are given within the Hospital Grounds.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term.
including Clinical Lectures.....\$140 00

Matriculatⁱon Fee..... 5 00

Demonstrator's Ticket (including material for dissection)..... 10 00

Graduation Fee..... 30 00

For the Annual Circular and Catalogue, giving regulations for graduation, and other information, address the Secretary of the College, Prof. Austin Flint, Jr., Bellevue Hospital Medical College.

MIAMI MEDICAL COLLEGE OF CINCINNATI.

NINTH ANNUAL ANNOUNCEMENT.

The next Regular Course of Lectures in this Institution will commence on Monday, October 5th, 1868.

FAULTY:

- GEORGE MENDENHALL, M. D. Obstetrics.
B. F. RICHARDSON, M. D.....Diseases of Women and Children.
H. E. FOOTE, M. D.....Anatomy.
JOHN A. MURPHY, M. D.....Theory and Practice of Medicine.
W. H. MUSSEY, M. D.....Operative Surgery and Surgical Pathology.
WM. CLENDENIN, M. D.....Mil. Surgery. Surg. Anat'y & Principles of Sur'y.
E. WILLIAMS, M. D.....Ophthalmology and Aural Surgery.
E. B. STEVENS, M. D.....Materia Medica and Therapeutics.
W. H. TAYLOR, M. D.....Physiology. Pathology and Morbid Anatomy.
S. A. NORTON, A. M.....Lecturer on Chemistry and Toxicology.
C. P. JUDRINS, M. D. }Demonstrators of Anatomy.
W. K. PERRIN, M. D. }Assistant to Chair of Chemistry.
C. P. DIVAN, M. DAssistant to Chair of Chemistry.

FEES.—Matriculation, \$5; Demonstrator, \$5; Graduation, \$25; Professors' Tickets, \$60.

For particulars and Circulars, address,

GEORGE MENDENHALL, M. D., Dean.
Or E. B. STEVENS, M. D., Secretary.

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The material (which is the purest Trieste Mustard, prepared especially for this purpose, and contains no foreign substance to dilute its strength) is spread evenly by appropriate machinery upon paper in three different sizes, for general family purposes, which may be altered in shape by a knife or pair of scissors to be adapted to any portion of the body, as the throat, temple, or behind the ears. To persons traveling or temporarily sick away from home, requiring such an application, its advantages are apparent, and physicians in the practice among a class who have neither the convenience nor requisite skill to prepare properly a Sinapism, will find this an admirable remedy.

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THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

VOL. XI.

SEPTEMBER, 1868.

No. 9.

Original Communications.

ART. I.—*Oxygen—Its Generation for Therapeutic Uses.*

BY S. A. NORTON, A. M., Prof. of Chemistry in the Miami Medical College, Cin'ti.

CLEVELAND, July 28th, 1868.

FRIEND STEVENS.—A few days ago Mr. H. C. Gaylord, of this city, directed my attention to a so-called "Patent Oxygenerator," which he had received from London, Eng., but which had failed to evolve oxygen as anticipated. At his request I analyzed the mixture, and found it to consist of chloride of lime, (bleaching powder) and a very small amount of oxide of cobalt. Wishing to test the process, we procured fresh materials and obtained the desired result by following substantially the directions on the label of the patent mixture. I think you will be interested in the process, which affords a ready and available method for evolving oxygen for the purpose of inhalation.

It is simply this: To an ounce of fresh chloride of lime (Ca. O. Cl.), contained in a suitable flask, add a gill of boiling water into which has been previously dropped from ten to twenty drops of a saturated solution of nitrate of cobalt. The cobalt at once blackens, absorbs the oxygen from the lime, and again yields it to the air, and so continues until the bleaching powder is reduced to chloride of calcium (Ca. Cl). The yield is regular and sufficiently rapid for most purposes. We obtained nearly a quart of oxygen from an ounce of bleaching powder. No heat is necessary except to boil the water before mixing the materials.

I afterward tried mixtures of chloride of lime with per oxide of manganese, and with per manganate of potassa; but did not find them as satisfactory, although I had no difficulty in obtaining oxygen from them. The ordinary methods requiring much heat are, of course, out of place in a sick room. For laboratory practice there are several other methods more desirable than the one described.

The question which I would like to have answered is, how far oxygen has value as a therapeutic agent? Dr. Pereira, after stating that it has been employed in asthma and some other diseases, declares that the effect of the inhalation of oxygen would be only temporary, and but palliative at the best. Dr. Birch recommends it highly in cases of obstinate constipation, and asserts that, properly administered, it produces most satisfactory results. Dr. Elisha Sterling, of Cleveland, proposed to employ it in a case of rheumatism affecting the diaphragm, and thereby to make the small quantity of air inspired, do the work of the normal respiration. If, in such a case, the brain were overcharged with venous blood, the administration of oxygen could not be otherwise than beneficial. Of course it would have a tendency to prevent the congestion of the brain.

There can be no doubt that in all cases of suffocation, oxygen would afford the means of instant relief.

It would not be difficult to arrange an apparatus very convenient for inhalation. Let the oxygen be evolved in any small jug that will stand the heat of boiling water, and let the jug be warmed before adding the boiling water; then let the oxygen be conveyed by a tube into a Woulfe's bottle containing a weak solution of caustic potassa, and inhaled from a tube inserted in the outer neck of the bottle. Let the middle neck of the bottle have a tube just dipping beneath the potash solution, so as to permit the patient to draw in atmospheric air, if the supply of oxygen be at any time deficient. The solution of caustic potash would absorb any chance trace of chlorine.

It seems to me that there must be cases in which oxygen inhaled would be beneficial. Dr. Birch also commends "oxygenated water." The term is unfortunately ambiguous. It is sometimes applied to per oxide of hydrogen, and sometimes to solution of oxygen in water. Water may be made to absorb any amount of oxygen under pressure, in the same way that "soda" water is charged with carbonic acid. At ordinary pressures it absorbs less than 5 per cent.

Apropos of this subject of oxygen, there are some facts which seem to me to have received an explanation that is not entirely sensible. Humbolt, Von Tocherdi, and other South American travelers, have stated that, "at high elevations on the Andes, the skin cracks, and blood issues from the nose and ears;" and further, that the Peruvian Indians "are subject to a malady called *veta*, in which the head aches violently, its veins are swollen, the extremities grow cold, and breathing becomes difficult." The explanation generally given, is that "the pressure of the atmosphere is diminished so much, that capillaries are expanded, and even burst by the expansion of the air and other fluids of the body."

In the first place, many of the phenomena appear to be peculiar to the Andes. The cracking of the skin may be accounted for readily enough, by the wonderfully dry atmosphere of Peru, aided by the diminished temperature at high elevations. The other phenomena are symptoms of impending asphyxia, and are doubtless caused by the *rarity* of the air, and not by the diminished *pressure* of the atmosphere. For by the law of fluid pressures, the atmospheric pressure is transmitted, undiminished, in every direction, and is equalized in every part of the body. No air, or other fluid, could be so confined within the body, that it would not be free to obey this law in the time requisite for the ascent of a mountain. Even in the rapid flight of a balloon, the malease of the aeronaut is not due to any difference between the external and interior pressures of the body. It may be, that in experiments with air pumps on mice and birds, the victim within the receiver suffers, because of the *sudden* removal of the external pressure; but I can not imagine that any inconvenience, whatever, will arise from this cause in ascending mountains.

As the pressure diminishes, the air becomes rarer, and, consequently, at high elevations the lungs take in a less quantity of oxygen at each respiration. If each inspiration is two hundred and forty cubic inches, then, at the sea level with thirty inches barometer, the weight of oxygen inhaled at every breath is about sixteen grains. At the height of a mile the same bulk of air contains about thirteen grains of oxygen; at the summit of Mount Blanc about nine grains; at the highest passes of the Cordilleras of Peru, about eight grains; and at the highest passes of the Himalayas a little less. Now, by so much as the system is deprived of the normal weight of oxygen required for arterializing

the blood, by so much will there be a tendency to disturbed action, which will result in lassitude, vertigo, and congestion, such as is observed by mountain tourists. The remedy for this rarefaction of the air is the enlargement of the lungs. The Andean Indians are said to be large chested men; but such persons should be exempt from the *veta*.

Imported English greyhounds are unserviceable on the plateaus of Mexico, because they are short winded even at that comparatively low elevation; but their descendants, after two or three generations, are long winded enough.

In our latitude the range of the barometer is about three inches, which corresponds to one-tenth of the supply of oxygen; that is, at times we inhale one-twentieth more or one-twentieth less than the normal amount. The variation caused by heat is still greater. Air raised from zero to 98° F., will expand one-fifth. On a summer day with a range of 33° F., the lungs may inhale one-fifteenth less oxygen at noon, than in the morning, although the barometric pressure remains the same.

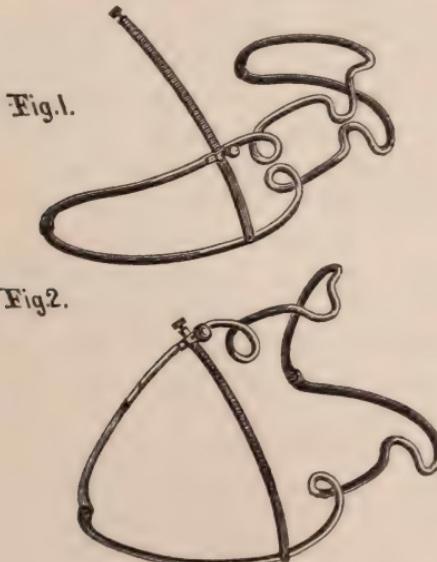
How far such a diminution of oxygen affects our comfort, I am incompetent to state. The question of bodily comfort is exceedingly complex, being based on general health, modified by external causes, almost innumerable, food and drink, rest and labor, quiet and quarrels, joys and sorrows. Among these causes the state of the atmosphere holds an important place. Perhaps, at some future time, we shall learn to prognosticate a happy or disturbed state of mind and body in our friends, by the wind gauge, the barometer, the thermometer, and the hygrometer; and, perhaps, physicians will be led to make careful meteorological observations before visiting their patients. I am of the opinion that the hygrometer will then be found the most trustworthy indicator of bodily ease and discomfort. A high dew point affects us more than heat or atmospheric pressure, because then the perspiration less readily escapes from the skin, but remains to clog every pore as if with a thin varnish. A high barometer is generally attended by a low dew point, but of itself is to be regarded as unfavorable to evaporation. Heat favors evaporation, but also increases the amount to be evaporated. A brisk wind is a fine evaporator and a great exhilarator. A sultry day is still, hot, and moist. Its discomfort does not seem to depend upon the relative amount of oxygen consumed.

ART. II.—*An Instrument for Keeping the Jaws Apart during Operations in the Mouth or Throat.*

BY W. H. MUSSEY, Prof. Operative Surgery and Surgical Pathology, Miami Medical College, Cincinnati.

The necessity for a substitute for the wooden or cork "gay" to keep the mouth open during operations within it, especially in children, led me to the use of a large sized wire eyelid separator, in the case of a young child with excessive hypertrophy of the tonsils, where repeated attacks of acute inflammation had caused adhesions of the glands to the pillars of the arch of the palate, necessitating the separation of the adhesions by dissections with the blunt edged knife, previous to the application of the tonsilotome.

The "substitution" was so satisfactory that I endeavored to improve upon it, and projected an instrument with the means to fasten it at any desired angle, the ends curved back upon the cheeks so as not to be in the way of the operator. Mr. Tieman, of New York, has given expression to the idea, in the instrument represented in the accompanying cut.



It consists in two pieces of wire appropriately curved, united by rivets, forming hinges at the two extremities, the center curved in the manner of the eyelid speculum, but larger, and adapted

to the shape of the jaws, so as to rest when applied. Upon the alveolus of each maxilla, a light bar is placed upon one side to which a screw fastens it at any point, preventing displacement, or the closure of the mouth. The two ends are bent so as to apply to the sides of the face, being entirely out of the way of the operator, who can proceed to manipulate without embarrassment.

The dimensions of the instrument are from joint to joint over the curvature, eight and three quarter inches, in a direct line from joint to joint, five and one quarter inches; the central mouth curve being one and one quarter inch in length, and three fourths of an inch projection internally.

The artist has represented a three-quarters side view.

In Fig. 1, the instrument is closed, and Fig. 2, represents it opened. Imagine it within the jaws, and you have an open countenance, sufficient for all practical purposes.

ART. III.—*The Diagnosis of Heart Clot.*

BY A. P. DUTCHER, M. D., of Cleveland, Ohio.

The formation of a blood clot in the heart is always a fatal occurrence. Some writers have spoken of the possibility of its removal, and have suggested certain therapeutical measures for its accomplishment.* But I have never met with an instance of recovery from this accident, where the diagnosis was pronounced. That it is an accident will be doubted by no one, who has made the subject a matter of careful investigation.

The causes which lead to the formation of heart clot are numerous. Among the most common may be mentioned a deficiency of red corpuscles and a superabundance of the white corpuscles of the blood, excess of fibrin in the blood, softening of the walls of the heart, congestion of the lungs, pneumonia, endocarditis and syncope. The latter is probably the more immediate cause. Hence, whatever produces sudden and prolonged syncope, exposes an individual to all the dangers of coagula in the heart. It is, therefore, a source of great mortality in all wasting diseases, such as cholera, camp diarrhoea, typhoid fever and uterine hemorrhage.

* See American Journal of the Medical Sciences, April No. 1867, p. 305, and the Medical and Surgical Reporter, Vol. IX., p. 381.

The explanation of the theory of the formation of heart clot is very simple. It may occur in two ways. In the first place when the blood becomes deprived of any of those constituents which render its circulation easy, especially when deficient in red corpuscles, and abounding in the white, as in anemia, the latter particles of the blood possess a peculiar property of readily adhering to one another, and under these circumstances it is not uncommon for agglutinations to take place among them, and when the heart is not properly innervated, the stream of blood which passes through it becomes slower, and an agglutination of the corpuscles may take place, thus forming the nucleus of the subsequent clot. In the second place, if hemorrhage is profuse and sudden, so much so as to produce profound syncope, the brain temporarily ceases to innervate the heart, its contractions are suspended, blood accumulates in its cavities, and before the organ is restored to its wanted action, a coagula has formed.

Such formations in the heart, be they large or small, must always be a source of infinite embarrassment to its action, and permanent obstructions to the circulation of the blood. How long an individual may survive with a blood clot in his heart, it is difficult to prognosticate. If the clot is small and adherent to the walls of the cavity, the patient's vital powers good, and the blood speedily restored to a right state, his life may be continued for a long time, but on the contrary where the clot is free and large, it may, by the force of the circulation, if in the right side of the heart, be driven into the pulmonary artery in such a manner that not a drop of blood can pass, and the patient will immediately succumb.

But I commenced this article with the intention of making a few remarks on the diagnosis of heart clot. This I will do by transcribing a case from my book of *Medical Fragments*, which I propose some day to give to the profession if I can find a publisher for it.

One very cold and stormy night I was called about six miles from my residence, to see a woman aged thirty-five years. She had been married fifteen years, and was the mother of seven children. She had usually enjoyed good health, and never had any difficulty in her confinements. Two days previous to my visit she had a miscarriage at about the third month, had wasted most profusely, and had fainted several times. The last spell of syncope that she had, her friends thought for some moments she

had expired. By degrees, however, she revived, and in the course of three hours reaction appeared to be pretty fully established. She then commenced to complain of pain just under the sternum, said she could not breathe, and her heart felt as if it would burst.

At the time of my visit she had a small jerking pulse, skin cold and clammy, breathing short and hurried; heart pulsating most violently, its impulse extending over the whole chest. Auscultation eliciting but little, owing to the violence of the heart's action. The only sound that could be clearly made out was the bellows. The dyspnoea was most extreme, and the patient's countenance expressed the most intense suffering; her lips were quite purple, her eyes widely protruding from their sockets, and her nostrils expanded as if to catch every breath of air. The posture of the patient was peculiar, if not characteristic of the difficulty under which she labored. She was lying with her breast upon the *rave* of the bedstead, and her head and arms upon the seat of a chair, which was several inches lower than the *rave* of the bed. This was the only posture in which she could find the slightest ease; every attempt to change it produced symptoms of immediate asphyxia.

In making out a diagnosis of this case, nearly all the symptoms pointed to the existence of some serious lesion in the great central organ of the circulation. The history of the case precluded the idea of its long standing. It could not date further back than the miscarriage, for previous to this she had never a single symptom of heart trouble. They commenced to appear only a few hours after the last paroxysm of syncope. In most instances of heart disease, it is usually a long time before the symptoms culminate in such a climax as we witnessed in this case. It is true a patient may have slight dyspnoea, cough, occasional pains in the region of the heart, and slight paroxysms of palpitation of the heart, and not suffer any special inconvenience from them, yet the organ may suddenly give out and the individual instantly expire. This was the case with a patient of mine by the name of Hudson. He had had slight symptoms of heart disease for several months. One morning just after rising he was seized with pain in the cardiac region, and in five minutes from the commencement of it he had ceased to breathe. Post-mortem showed extensive softening of the walls of the heart.

But the case we record is one where all the more fatal symptoms of heart disease were developed in a few hours. What we may ask has produced the sudden transition from a state of com-

parative ease to one of suffering and impending dissolution? We answer, a heart clot, which no doubt formed during her state of extreme syncope. And it must be of considerable magnitude, for it has so obstructed the passage of the blood through the organ, that only a small portion of it can reach the lungs for oxygenation. The clot is in the right side of the heart. This is evident from auscultation which shows no obstruction in the pulmonary air cells, the air rushing in and out with the most perfect freedom.

The prognosis, as a matter of course, was unfavorable. The patient lived five days; and it was wonderful to witness with what tenacity she clung to life. She appeared to live almost entirely by her nervous forces. As for blood she had but little, and that little was so obstructed in its circulation, that only a small portion of it was available for the purposes of respiration and nutrition. The great centers of organs must fail, and death receive his prey.

To me, it is always a fearful thing to see a strong and courageous man contending with the powers of dissolution, and we almost instinctively shrink from the scene. But when a delicate woman is passing through the same ordeal, it arouses our tender sympathies, and prompts us to put forth every effort to mitigate the pangs of dissolving nature. Various therapeutic agents were prescribed, but none appeared to be of any special benefit, excepting the valerianate of zinc, four grains of which were given in the form of pills every two hours. Our patient, however, continued to suffer most intensely with dyspnoea until the very last. Every attempt to change her posture from that described, was attended with the most threatening symptoms of immediate suffocation. She died in that posture with her head resting upon the chair.

Twenty-four hours after death, post-mortem confirmed the correctness of the diagnosis. The right ventricle of the heart contained a clot which nearly occupied its entire space. Its general appearance gave evidence of recent formation; its chief bulk being composed of coagulated blood, invested with a thin layer of fibrin, which on close inspection proved to be the superficial part of the clot deprived of the red corpuscles. If life had been prolonged for several days more, I have no doubt the clot would have been so changed as to present nothing but the fibrinous constituents of the blood.

The heart presented no structural lesions. There was no congestion of the lungs or bronchial tubes. The liver was very much congested and the great hepatic vessels leading into the ascending vena cava, and the cava itself were perfectly engorged with blood. The superior cava as well as the right auricle of the heart was also engorged with blood. There could, therefore, be no doubt as to the cause of her death. The clot had so plugged up the ventrical that the blood could not reach the lungs in sufficient quantities to sustain the wants of the system, and the flame of life was literally extinguished for want of blood.

In reflecting over this case, you will discover three things that may be regarded as diagnostic of heart clot.

First.—The want of accordance between the pulse and heart in point of force; the first being very small, jerking and intermittent, while the latter was violent and persistent.

Second.—The peculiarity of the respiration, and the distressing character of the dyspnoea. The most extreme case of pulmonary obstruction I ever met with could not rival it in intensity.

Third.—The posture of the patient. I have for years observed verified it by post-mortem, that individuals suffering with heart clot of recent and sudden formation commonly seek a posture similar to my patient. They almost instinctively turn upon their breast, and strive to get their head lower than the chest.

Cases like the one we have just described are pregnant with instruction. They teach the practitioner to be on his guard and use every instrumentality in his power to avert syncope in individuals attacked with sudden and profuse hemorrhage. Persons may, and do frequently die from excessive hemorrhage, but I believe more die from its sequels, and heart clot may be ranked as one among the chief.

In patients laboring under hemorrhage from miscarriage, it is bad practice to allow them to waste until the failing pulse, hurried breathing, cold and clammy skin, and blanched countenance, speak in language not to be misunderstood that she is on the verge of syncope. Every effort should be made to staunch the bleeding. It is true this is not always easily accomplished. But it should be attempted promptly, and our most reliable therapeutics should be employed at once. The tampon I regard the most efficient of all our instrumentalities in this case. Opium, ergot, acetate of lead, per-sulphate of iron and cold water, are

ood auxiliaries, but he who depends upon them exclusively, is leaning upon a broken reed, that will fail him when he most needs help.

ART. IV.—*Iodine an Antidote to Strychnine.*

BY JAMES I. ROOKER, M. D., Castleton, Marion Co., Ind.

An article appeared in the *Lancet*, for June, (re-print), by Henry Wm. Fuller, M. D., Senior Physician to St. George's Hospital, entitled, *Iodine an Antidote to Strychnine, and the Impropriety of Prescribing Quinine or Strychnine with Tincture of Iodine.*

The Dr. remarks: "In the course of my practice it has often occurred to me to prescribe a mixture containing quinine or strychnine, together with tincture of iodine," and have not been aware of any incongruity in the dispensing of it until last summer a chemist called my attention to the fact that it is impossible to dispense a mixture containing strychnine and tincture of iodine.

In whatever sequence the ingredients are mixed, I find that the whole of the strychnine is precipitated by the tincture of iodine. Indeed, so strong is the affinity between these two ingredients, that the two fluid drachms of tincture of iodine are capable of decomposing six fluid drachms of the liquor strychnæ, producing an insoluble compound of iodine and strychnine.

"Now it is obvious that for medicinal purposes, a mixture in which such a precipitate occurs must be almost valueless. The patient not only loses the benefit of the quinine or strychnine, but of the iodine also. It is not unreasonable, therefore, to lay down as a rule, that tincture of iodine ought not to be prescribed in a mixture containing either of the above named alkaloids. Another question of practical importance arises out of this observation. May not a dilute solution of iodine be advantageously given in cases of poisoning by strychnine?" Coming from so high authority the suggestion favorably impressd me, and, inasmuch, as I had been called a few times to administer to those suffering from strychnine poison, and finding all my efforts proved futile, induced me to institute a series of experiments on the lower animals. In order to further test its antidotal properties, I, therefore, procured three healthy pups, of the same age, twelve young rats, and two kittens. The two first experiments

were upon two pups. First took strychnine gr. $\frac{1}{2}$, water 3ij, tincture iodine, 3i, at a dose for the first ten minutes. The only perceptible effect was frothing at the mouth, gnashing the teeth, whineing, and shaking the head. In fifteen minutes falls down, laborious respiration, heart's action increased. Twenty minutes, tetanic spasms—violent, gave 3i, tincture iodine diluted with water at a dose; thirty minutes no perceptable change for the better, in short geting worse, a touch or noise producing violent spasms; death threatened from asphyxia. Forty minutes, much worse; commenced the administration of chloroform by inhalation; breathing became regular; heart's action more quiet; appears as in a quiet sleep. As soon as the effect of the chloroform passes off, all the former symptoms return with the same violence. The only effect of the chloroform is palliative. I continued the administration of chloroform for three hours; it was then discontinued. Spasms returned at once with renewed force, and death came to its relief in a half an hour from asphyxia.

Second pup, gave Sulph Strychnia, gr. $\frac{1}{2}$, water, 3ij; attacked with the peculiar spasms in five minutes. Twenty-five minutes, gave tinct iodine 3i, in water. Thirty-five minutes, still geting worse, chloroform administered for three hours, when discontinued death followed in twenty minutes.

Post-mortem examination twelve hours after death in each case. First pup—Stomach full of indigested milk; mucus membrane healthy; could not detect with starch any trace of iodine, or of strychnine, by the taste, gall bladder ruptured; right heart contained dark blood, with fibrinous clot; left empty; no further examination made. Second pup—Same condition, except gall bladder entire, but empty.

Third Experiment.—Pup—Gave sulph strychnia, gr. $\frac{1}{2}$, water, 3ij; attacked with tetanic spasms in two minutes; left to itself; died in two hours apparently from exhaustion and asphyxia.

Fourth Experiment.—Twelve young rats—Gave Hall's Solution Strychniæ, ten drops to the first six; the other six, same amount strychnia containing equal amount tinct iodine; all died in one hour.

Fifth Experiment.—Two kittens, same age—First, took 3i, Hall's Sol. Second—Hall's Sol. 3i, tincture iodine, 3i, water, 3ij; administered to both at once. Both died in two hours, in violent spasms.

REMARKS.—These experiments were roughly made by one not accustomed to it. Still they go so far to show the inertness of iodine as an antidote to strychnine poison. But I do think that no intelligent physician, called to treat a case of this kind, would be so blind as not to see the indication for chloroform.

ART. V.—*A Case of Triplet Birth.*

BY S. M. RYKER, M. D., Lebanon, Ind.

I was called on the morning of the 11th Feb., 1868, to visit Mrs. W——, aged 35, sanguine temperament, who was in labor with her second child, but who added, before the labor was completed, three children to her family. I am not induced to report the case on account of anything remarkable in either the case itself, or the treatment adopted; but simply to report a case of triplets. The head of the first child presented favorably, and the *os uteri* and soft parts being well relaxed, it was born in twenty minutes after my arrival, the *Tuniculus Umbilicalis* being wrapped around the neck. The breech of the second child presented, but was delivered in fifteen minutes after the first—cord around the chest. The head of the third one presented, was delivered by the second pain after the second child was born—cord around the neck. Upon examination, *per vaginam*, found but one placenta large, and adhered at all points to the *fundus of the uterus*. Feeling assured that it could not be expelled by the natural efforts of the uterus, I cautiously introduced my hand into that organ, and with the fingers pulled it off from its adhesions, and delivered it at once. A little friction over the region of the uterus arrested all hemorrhage, and the lady had a “good getting up,” without a single untoward symptom, and was, in four weeks, attending to her household duties. The children—two male, and one female—are all doing finely, and weighed at birth, respectively, six and a half, seven, and eight pounds.

ART. VI.—Case of Suppression of the Menses of Ten Months Duration, from Imperforate Os Tineor. Complicated with Retroversion.

BY J. A. EASTMAN, M. D., Brownsburg, Ind.

I was requested by Dr. T. A. Graham, to see Mrs. M——, aged 38, June 30th, 1868, suffering from severe bearing pains simulating those of labor, for the past three days, and was informed by the Doctor, that he had attended her in labor about one year previous, and that the labor not progressing properly, after eight hours another physician was called, and delivery effected by the forceps—the child being dead. Vaginitis followed resulting in a very large vesico-vaginal fistula. Nothing more was heard from the case, except that she had consulted several doctors as to the propriety of an operation, none having been performed. On reaching the case, she expressed herself, that she felt as if each approaching pain were approaching death. On further inquiry into the history of the case, I learned that she had had similar pains about six weeks from her last labor, and that they had increased at every monthly period since. Health very much broken down; bowels costive; urine passing in quantity whenever she made any decided effort at stool, jarred the pelvis by stepping, getting out of bed, etc.; hypogastric region slightly enlarged with fluctuation. On passing the finger per vaginam, it came in contact with a tumor filling up the vulva and pelvis. The parts being intolerant of further manipulations, I gave a brisk purgative, and left her until the bowels should be moved, there having been no action in six days. When I returned, accompanied by Dr. Graham, we found that the bowels had moved, but no cessation of recurring pains. We placed the patient on her back, administered chloroform, and proceeded to decide whether we had to deal with a bladder prolapsed through the fistula, a polypoid tumor, or retroverted uterus, distended with menstrual fluid, and filling the entire pelvis. Passing the finger into the vagina up to the fistula, and a catheter into the urethra, I found the bladder in its proper place, except that the tumor crowded it slightly upward. When I withdrew my finger a quantity of urine followed. I then passed two fingers up on the left side of the tumor, and could feel what had, at some time, been the os, and soon determined that the uterus was distended as large as it should be with a fœtus at four months, retroverted and so twisted as to place the os in the left iliac fossa. I readily

pushed the fundus upward. It required no change of posture, for the large fistula enabled me to press nearly direct on the organ. I then introduced a quadrivalve speculum, and expanded the valves as far as possible, exposing the side of the neck. I then hooked a long tenaculum into the neck, and brought what was once the os fully in view. A band as large as a male catheter, was pressing across the end of the neck, and attached to the sides about half an inch from the scar representing the os. The upper portion of the vagina had, with the vaginal portion of the cervix, been very much inflamed at some time. Dr. G. agreeing with me in my diagnosis, I introduced a narrow bistouri to the place where the os had been, passed it up one inch, where it met no further resistance. I then withdrew it, and following it, came not less than three pints of fetid menstrual blood. The patient rallied from the chloroform quickly. More or less of the fetid fluid passed for about three days, and stopped. I then examined again, found the uterus in its normal position, of nearly normal size, and admitting the sound freely. She had felt so much better that, in spite of my strict orders to the contrary, she had been walking about the house attending to her domestic affairs, and has continued to do so ever since.

Medical Societies.

Proceedings of Cincinnati Academy of Medicine.

JOHN DAVIS, M. D., PRESIDENT, J. L. NEILSON, M. D., SECRETARY.

DISCUSSION ON DIPHTHERIA—CONTINUED.

Dr. Barthelow said, in taking the floor, that he scarcely felt able to assume a part in the discussion, for he had, during the week, been suffering with intermittent fever, and had, but a short time before coming to the Academy, taken a large dose of quinine, so that he felt neither mentally or physically able to do justice to the subject. At the same time, through this illness, he had not been able to make that thorough and complete examination of the subject which it demanded; nevertheless, as he had made some preparation, and as the Academy expected him to speak, he would do as he best could.

It would be remembered by the President and the Academy, that at the last meeting he had not been in favor of prolonging the discussion, and would have agreed to yield his right to the floor if the Academy had wished to close the debate; for he had thought that the discussion had gone on as far as was profitable, and, upon a disease so well known as Diphtheria, it was a waste of time to go over and over again the well trodden grounds of belief. But the Academy had decided adversely, and he appeared upon the floor this evening, not to discuss the nature of the disease in question, but to answer the strictures of certain gentlemen, and to do this, he would first recapitulate the points which had caused these remarks.

It would be remembered by the Academy, that he had ventured to differ from the author "of the ablest and most important paper ever presented before the Academy," in attempting to prove, by cotemporary authority, that the views in that paper, imputed to Bretonneau, were not those at present held in France, and not those of Bretonneau *at any time*; although the gentlemen who had assumed to be the sole interpreters of Bretonneau, would scarcely permit that any thing in refutation of their assumptions should be offered, expressing violent surprise that their authority could be considered at all questionable. He, (the speaker), had been to great labor in exhuming from the Ohio Medical Library the original documents, and had proved the writings from which he would now quote; and he had to say, before proceeding upon the details, that, whereas he had in the beginning spoken of the gentleman's paper as of no utility, as being merely a rehash, he would now go further, since he had before him the printed paper, and had more fully examined the writings of Bretonneau, and say, that the so called "postulates of Bretonneau" were pure assumptions or presumptions of the gentleman; that not only in no particular did they represent an opinion of Bretonneau, but beyond this they were actual misrepresentations of every position ever taken by that illustrious authority; and how any one with such free access to the writings of Bretonneau, as the gentlemen professedly had, could publish such a paper, was to him incomprehensible.

The speaker then resumed the discussion of the paper, by reading from the *Cincinnati Lancet and Observer*, April number of 1868, the opening section of Dr. Jno. Davis' paper upon Diphtheria as follows. "In a former article on the subject of Diph-

theria, which I read before this Academy in 1868, I only went as far as to give a summary of the views of Bretonneau on this topic. In now resuming the effort to show what is really to be understood by the term Diphtheria, it will be necessary first to examine Bretonneau's positions in detail. He it was who introduced the term into use, and the part of his definition of Diphtheria, the essential part, the statement of the classes of diseases to be included in it, has been generally accepted;" and there followed this section, a statement of what the author had been pleased to call "Bretonneau's Postulates," which could not, in the sense of postulates, be called Bretonneau's, even if they had correctly stated his opinions, since he was merely a historian. And this so called "complete examination" of Bretonneau's views was concluded with the following remarkable paragraph : "Therefore, while we disagree with him on some of his conclusions regarding Diphtheria, we heartily accord that his labors have promoted the advancement of medical science, that his life having this result, was well spent, and that his name is to be held in honor."

The author had thus, apparently, occupied the paper with a discussion of Bretonneau's views; he had in this article made, ostensibly, an examination of the postulates of Bretonneau, "That Diphtheria is a generic term applicable to all epidemic sore throat, either with or without exudation," had been the burden of the gentleman's song, so constantly and persistently repeated upon the floor of the Academy, that it was indelibly stamped upon the speaker's memory ; and the profession were, finally, congratulated, in this "ablest and most important paper," that they had at last fixed upon a generic term for all anginous diseases. Yet, all this, in the face of the fact that all authorities who have discussed the subject, all systematic modern writers, agreed that it was a disease *sui generis*, and the term not applicable to a class of diseases. All who had spoken in the Academy, with the exception of these two self-constituted champions of Bretonneau, had endeavored, whatever might have been the minor differences of opinion, to impress upon the Academy that it was a specific and most distinct disease. Indeed one gentleman with the greatest carefulness, we might almost say, with painful particularity, had, at the last meeting, pointed out, by numerous authorities, the distinct and isolated nature of the disease; showing this unanimous opinion of the profession, in such a manner,

that it seemed a labor of supererogation for him to say any thing further.

But the author of the paper had gone further than this, and charged upon Bretonneau the responsibility of having introduced the new classification, saying as had already been read: "He (Bretonneau) it was, who introduced the term into use, and the part of his definition of Diphtheria, the essential part, the statement of the class of diseases to be included in it, has been generally accepted." Now, the speaker would confidently assert, that Bretonneau never thought such a thing, let alone ever gave utterance to such an opinion; for he had spent his whole life in an effort to point out and establish the distinct and specific character of the disease; a fact which he would speedily prove by the unmistakable words of Bretonneau himself. He held in his hands two books, the Paris edition of Bretonneau's works, 1826, entitled, *Des Inflammations Speciales du Tissu Muqueux et en Particulier de la Diphtherite ou Pelliculaire Inflammations*, and the Sydenham Society Translation of 1859. He had gone to the trouble of verifying the English work, and had found it in every particular correct.

On page 2 of the Paris edition, and page 1 of the Sydenham Translation, Bretonneau had said as follows: "I have had occasion to study this affection under all its forms, during the course of several epidemics, and I have been able to determine that it is separated by special properties, from some other inflammations accompanied by mucus exudations, affections which are very distinct, and the characters of which I have also pointed out." He had more pointedly expressed his opinion on page 20, (*First Memoir Sydenham Translation, page 41, of Paris Edition*): "I should not express my entire opinion, if I did not add that I see in this membranous inflammation, a specific phlegmasia as different from a catarrhal phlogosis, as the malignant pustule is from Zona, a disease more distinct from Scarlatinal angina, than Scarlatina is itself from Small-pox; in fact a morbid affection *sui generis*, which is no more the last degree of a catarrh, than a squamous eruption is the last degree of Erysipelas.

As it is impossible to apply to a special inflammation, which is so well marked, any of the improper names which have been given to each of its varieties, let it be permitted me to designate this phlegmasia by the name of Diphtherite, derived from *Diphthera pellis exuvium, vestis coriacea*, whence comes *Diphtheroo corio obtego*.

"The more attention I have given to the study of the phenomena peculiar to this inflammatory condition, the more it has appeared to me to differ from every other, by characters which are proper to it." No language could be more explicit than this, and we find that he iterates and reiterates, to, if possible, the more forcibly impress this idea of its distinct character upon the profession.

On page 21, Sydenham Translation, pages 41 and 43, Paris edition, he has said: "The characters which I have just described distinguish also the diphtheritic phlegmasia from some other membranous inflammations, with which it is necessary not to confound it."

On page 23, (*Second Memoir Sydenham Translation, 43, Paris Edition*): "I have been led to propose the denomination of Diphtherite to designate the phlegmasia, which forms the particular object of this memoir, in order to distinguish it from several other pellicular inflammations, from membranous mercurial inflammation, and from a buccal phlegmasia which is accompanied by a caseiform exudation (a very distinct sporadic affection); but above all, this name will distinguish it from Scarlatinal angina, a membranous inflammation accompanied by a cutaneous exanthem, and which has often been confounded with diphtheritic phlegmasia, although it differs from it essentially by its mode of attack, its duration, and its different terminations."

On page 108, Sydenham Translation, 249, Paris Edition: "Diphtheritic Pharyngeal angina is simulated by Scarlatinal angina, by common membranous angina, by different inflammations of the larynx and trachea. I have already noticed, in the second part of this work, the obscurity which is thrown over the diagnosis of malignant angina, by the difficulty of discovering the distinctive characters peculiar to the different affections presenting themselves under the same appearances."

"We shall only succeed by the aid of observation, and by directing considerable attention to the subject, in determining the limits which separate them. In giving a greater scope to this part of my researches, I shall confine myself to pointing out the principal distinctions by which I have seen Scarlatinal angina, Common Membranous angina, and some cases of Laryngeal angina, resembling Tracheal Diphtherite, separated from one another, and from Malignant angina. I purposely avoid speaking of Phlegmonous Tonsillitis, Aphous inflammation of the

back of the mouth, and of Catarrhal angina, these three kinds of angina having too well marked characters to make us liable to confound them with Diphtherite."

On page 114, Sydenham Translation, 260, Paris Edition : "Common Membranous angina is of all the affections, which are frequently met with in practice, the most difficult to distinguish, at its commencement, from Diphtheritic angina. With the exceptions of the last two characters, (contrary to the statement of Aretaeus, deglutition becomes in general rather painful, and the pain in the throat often extends as far as the ear), which distinguish the Membranous angina only partially from the Diphtheritic angina; none of the principal differences presented by these two affections are omitted in the description of this able observer. Every practitioner has had occasion to meet with this disease, which is often reduced to a slight indisposition. Herpes Labialis of Willan is often exhibited about the mouth, or at the orifice of the nostrils, at the same time when the membranous erosion occupies the surface of one of the tonsils. A moderate degree of swelling, and a redness of slight extent, circumscribe the white spot. Although the corresponding lymphatic glands are sometimes swollen and become painful, we never see them acquire, as in malignant angina, an enormous volume, appearing out of all proportion to the extent and intensity of the inflammatory lesions of the mucus tissue."

On page 123, Sydenham Translation, 281, Paris Edition : "I have already had the occasion to make the remark, that some special accounts of membranous angina did not appear to refer to malignant angina, and I have quoted a case which leads me to believe that there may be developed in the larynx, certain exudations which are not the products of Diphtheritic inflammation."

On page 134, Sydenham Translation, 365, Paris Edition : Here Bretonneau had described six different kinds of angina; but as the description was lengthy, and the diseases well known, the speaker would only enumerate them: They were "Catarrhal," "Tonsillar," "Mercurial," "Membranous," "Common Fibrinous," "Scarlatinal," "Diphtheritic."

On page 138, Sydenham Translation, 380, Paris Edition : "I feel how paradoxical this proposition must appear, but I beg it may here be understood that I do not intend to speak of any thing except Diphtherite, properly so called, and that I do not compromise under this name, the numerous dissimilar affections

too commonly confounded under the denomination of Croup." It would be also noticed in regard to the heading of the description of the varieties of angina, that the French is more suggestive than the English translation, for it says: "The Specificity of the Diphtheritic Inflammation."

It would be seen, from these quotations, that Bretonneau had never dreamed that such an interpretation would be put upon his writings, for his whole life and energy was expended in an effort to bring clearly to view the specific character of the disease: and no language could more clearly express his convictions that it was *sui generis*, and could not be distorted to mean any thing else. He would now pass to the next postulate, and see what justice had been done Bretonneau by this, his exclusive interpreter. The author of the paper had said as follows: "As to his first. that Diphtheria is a proper generic term for all the forms of epidemic sore throat, I have nothing to add to what I have already said." In regard to this, it would be wholly unnecessary to speak, after the very full quotations already made; but it was a little singular that the author should have made an exception of Croup, which was the most nearly (as it was a purely membranous disease,) allied to Diphtheria, while he included those forms of simple inflammation, which were so widely different in nature from Diphtheria.

The history of Croup, by Dr. Holmes, mentioned in this paper, was obtained from Guersant's article upon that subject, pages 207-9, of the Sydenham Translation.

Further along we had another bit of history: "On the occurrence of the death of the first child of Louis Bonaparte and Queen Hortense, alluded to above, the first Napoleon called a concours of physicians to determine as to the disease which caused his death. The result was the article on Croup, in the 'Dictionnaire des Sciences Medicale,' written by M. Royer Collard." This was also an inaccuracy, for the article referred to was the sole and independent production of Royer Collard, written by himself expressly for that book, as were all the other articles in it. While the concours in question awarded prizes to both Albert, of Bremen, and Jourin, of Geneva. The article in the "Dictionnaire de Medecine," upon the same subject, was the production of Troussseau.

Beyond this, the second postulate could not be as stated by the author, for it bore upon its face no evidences of having been the

opinion of one of the most accurate of medical writers. It was too vague, and Bretonneau was remarkable for his scientific accuracy, and could never have expressed himself in the uncertain language of the *Essayist*. It was admitted in this paper, that Bretonneau correctly described the epidemic that happened in his neighborhood. "But he went too far," says the writer, "he went too far when he inferred that, therefore, this kind of deposit is invariably present in every case of epidemic soreness of throat." But the speaker would say, that if Bretonneau did go too far, for the author of "the ablest and most important paper," he did not for the cause of truth and science.

The fourth postulate, "that, pathologically, the exudation is a concrete specific poison, just as is that of primary syphilis, and that the virus is capable of propagation, only by the application of a portion of the pellicle from an affected to a sound part, or from one person to another." He would show this also to be incorrect, for, although Bretonneau had some such opinion at first toward the close of his life he modified it, and in proof of this assertion, the speaker read from page 178 of the Sydenham Translation, "I can not too often repeat that it is imported by an infected person, or by articles impregnated by the contagious principle."

The fifth proposition, "that ulceration is never present in this disease," was also an inaccuracy, for, speaking of the progress of the disease, on page 25 of the Sydenham Translation, Bretonneau had said as follows: "At this time the alterations of the organic surfaces is more apparent, than at the beginning. Portions of concrete matter are often effused into the substance itself of the mucus tissue. A slight erosion and a few ecchymoses are observed in the spots, which, by their situation, are exposed to some friction, or from which the evulsion of the false eschars has been attempted."

The author had gone on to speak of the epidemic, described by Bocquerel, in Paris, in 1841; of the epidemic in Paris in 1856, described by Isambert; of that at Bologne, recorded by Parachoud; but he had given the Academy no information of the sources from which he drew his information. He had given us but one book to refer to, and that was the Sydenham Report of 1859, and it would have been as well if he had announced in like manner the other authorities, that it might have been ascertained

if his accuracy in regard to them was as striking as it had been shown to be in other respects.

In conclusion, the speaker hoped that he had succeeded in placing Bretonneau in his true position as regarded Diphtheria. The labor he had expended in this effort was considerable in itself; but inconsiderable, when it was remembered that neither the mind of the profession, nor that of Bretonneau, had hesitated as to the true nature of the disease in question. Nevertheless, it was a labor which had been rendered necessary by the misrepresentations of certain gentlemen. It could not be expected that he who had been so persistently misrepresented by these gentlemen, who had assumed the exclusive prerogative of interpreters of Bretonneau, and one of whom was the author of the "ablest and most important paper ever presented before the Academy," that he should keep silence in regard to the personalities of the occasion. But it would be cruel to disturb them in their delectation. It was a good thing, both pecuniarily and otherwise, to keep the big end of the telescope down to the range of their vision, for while all the rest of the world dwindled into forced dwarfishness, they were themselves displayed in magnificent perspective.. At the same time that small portion of the profession, not included in these gentlemen, had the consolation tha it was only a lense that made the difference.

Dr. John Davis said that he proposed to answer Dr. Bartholow's objections to his paper *seriatim*.

One of Dr. Bartholow's first statements was, that Bretonneau was an illustrious author, and he felt gratified at this tribute to the worth of Bretonneau. He was pleased to find that he had been instrumental in bringing Dr. Bartholow to really knowing something about Bretonneau.

Dr. Bartholow, early in this debate, spoke of Bretonneau as an obsolete old author, who, after writing a treatise on Diphtheria, spent the rest of his life in writing memoirs to correct the mistakes made in that treatise. Now he styles him "the illustrious author," and ignoring what he said before, assumes to be a champion of Bretonneau. He quotes passages from him, against the positions taken in my paper. But I shall show that these paragraphs do not bear against me in the least, and that I have correctly represented Bretonneau.

As to my putting the teachings of Bretonneau in the form of postulates, he says, "Bretonneau wrote no postulates; he was a historian." It is true that he did not put his teachings in the form of numbered postulates, and that he was "a historian," writing, from time to time, what he found to be present in successive epidemics of sore throat.

But it is also true, that the best and most convenient way, both for understanding his teachings, and examining them, is to first collect them into postulates. This I have done.

Dr. Bartholow then asserts that these postulates are mere assumptions of mine, and that they in no particular represent an opinion of Bretonneau; that Bretonneau never dreamed that he would ever be regarded as considering Diphtheria a *generic* term. His whole life, Dr. Bartholow says, was spent to show that it is a disease *sui generis*, a *specific* disease, and that he did not intend the term Diphtheria as a *generic* one; and to sustain this assertion, Dr. Bartholow gave us numerous quotations from Bretonneau. But I shall show that not one of these citations is in the least antagonistic to a single position that I have presented as being from Bretonneau.

The speaker then discussed the various paragraphs from Bretonneau, read by Dr. Bartholow at the last meeting. The first was on page 1, of the Sydenham Society Translation. He said that it astonished him that any such abstract should be presented as being against any point taken in his paper. He had been very clear in defining Diphtheria as being *epidemic* sore throat. He had repeated over and over, in the course of this discussion, that Diphtheria means *epidemic* sore throat, and no other kind of sore throat. Dr. Bartholow's quotations show nothing more than that certain forms of sore throat are not to be considered as diphtheric. As to the paragraph before him, he had never said that Diphtheria is a "catarrhal phlogosis," "that it is allied to scarlatinal angina," or that "it is the last degree of catarrh." That there is no conflict upon these points, between himself and Bretonneau, must certainly be acknowledged.

Again, he could not see what bearing the paragraph selected from page 23, of the Sydenham Translation, had upon the discussion. It did not show any point as being at issue, between himself and Bretonneau. He had never maintained that Diphtheria is scarlatinal angina, that it is a mercurial inflammation, or a buccal phlegmasia.

On page 108, we have another paragraph which the gentleman quoted, and it is of the same character; and he did not see, why the gentleman had gone to the trouble to cull out these paragraphs, which occur about as often as Bretonneau described an epidemic of sore throat, and the object of which is evident; this being to distinguish between epidemic sore throat, (Diphtheria) and other forms of sore throat. He would say, once for all, that none of them contained any thing at variance with his definition of Diphtheria; that it includes all forms of epidemic sore throat, and nothing more.

From page 134, of the same work, the speaker read the full description of all the varieties of throat affections, described by Bretonneau, finding nothing in them at variance with his often expressed statement, that Diphtheria is epidemic sore throat. Dr. Bartholow had read this description of the different varieties of sore throat affections, as being against his position, as to the definition of Diphtheria; but that a careful examination of it fails to show that there is the least difference.

Dr. Bartholow had a citation to show that he was wrong in stating that Bretonneau believed, that no ulceration is present in Diphtheria. The speaker read from page 25, Sydenham Society Translation, where Bretonneau says, that he had believed that ulceration might be present; but after making *post mortem* upon fifty bodies, he had settled down to the opinion that ulceration did not occur, for in all these examinations he had not found it. For further proof, that Bretonneau did not believe in the existence of ulcers in Diphtheria, he would read from page 137 of the same book. It is as follows: "Being essentially superficial, we find it can not cease being so without losing its principle character, and without a fibrinous incrustation, or purulent secretion, taking the place of the pellicular exudation which accompanies it, and which constitutes the whole of its dangerous character." On page 151, of the same volume, we have the following. "Over the whole extent of the back part of the mouth, the exudation being closely adherent to the surfaces which it covered, so exactly resembled the appearance of eschars in its aspect and fetor, that it was necessary to guard against this *fallacy*, in order that we might not confound the putrid alterations of the inorganic pellicles with a true gangrenous lesion. A thick and soft mass of concrete matter obstructed the upper part of the pharynx, and in the nostrils, was converted into a supple and elastic membrane

of a yellowish white color, which projected beyond their orifice." Geursant, the friend and admirer of Bretonneau, says, in his article on Croup, of Bretonneau: "He has demonstrated, that epidemic malignant angina is not all of a gangrenous nature, as was, heretofore, supposed, but that it is a true pellicular inflammation, similar to that of Croup. He had proved that these two morbid alterations, erroneously considered as very different, are identical in their pathological relations, and different only in the spot which they occupy. He had also proved, in an incontestible manner, that gangrenous angina and Croup, have almost always presented themselves in combination in all the epidemics of malignant angina, described by ancient and modern authors, as they have done in the epidemic of Tours, and the neighboring district under his observation."

The speaker said, that he might go on thus at great length, quoting more extensively from the book before him, to show that he is correct on this point. But he would not occupy more of the time of the Academy on this particular topic.

Again, Dr. Bartholow had taken exception to that portion of the speaker's paper, which says, that the result of the *concours*, called by the first Napoleon, upon the death of the child of Louis Napoleon and Queen Hortense, was the article on Croup in the *Dictionnaire des Sciences Medicale*, written by M. Royer Collard.

Dr. Bartholow said, that this article had no connection with the *concours*, and that the prize essays were those of Jurin of Geneva, and Albert of Bremen; and not by Royer Collard.

Here, again, we have a charge of inaccuracy, without any foundation for the pretense. The speaker said his paper did not assert that Royer Collard wrote "the prize essay," as the gentleman assumed, and he never supposed that Royer Collard had written "the prize essay." What the speaker had said, was that the article of M. Royer Collard, was the result of the *concours*. A number of essays were presented at that *concours*, and two of them, as stated above, were deemed as worthy of prizes. M. Royer Collard, from these various essays, prepared his article in the *Dictionnaire des Sciences Medicale*. It was right, therefore, to have said that the result of the *concours* was the article by M. Royer Collard. This is proved by a reference to page 209, of the Sydenham Translation. Guersant there says, as follows, in his article on Croup: "Several, more or less, remarkable works were published on the same subject, principally at the commence-

ment of the present century, on the occasion of *the concours*, proposed by the French government, on Croup, and the works of Vieusseux, Jurine, Schiveline, Allers of Bremen, Double, Royer Collard, etc., undoubtedly contributed very materially to the better knowledge of Croup, considered as an isolated disease." All these works were the result of the celebrated *concours*; but the one written by M. Royer Collard, for the *Dictionnaire*, was the authoritative one. This article disturbed Bretonneau very much, and he has made two references to it; one on page 29, and the other on page 179, of the New Sydenham Society Translation.

It was from page 179, that Dr. Bartholow had gained his information as to the prize essayists. All this was well known to the speaker, when he wrote his paper, and that paper does not say that Royer Collard's article was "the prize essay." The paper says that it was the result of the concours. M. Collard took from the different essays, presented on that occasion, all that was considered important on the subject of Croup. His article, in the *Dictionnaire*, must, therefore, take precedence over all others, as the result of the concours, and particularly as it was published in the authoritative work of France.

Dr. Bartholow had said, in regard to the second postulate, given in the speaker's paper, that it is too vague to have been the expression of this "illustrious" author. The speaker would not discuss the question, whether this postulate is clearly expressed or not; but he would make the remark that this observation of the gentleman, had been prompted by ill-humor, rather than a regard for the fame of the "illustrious author."

Dr. Bartholow had also charged him with inaccuracy in the fourth postulate. The speaker then read from his paper the fourth postulate. "That the exudation is a concrete specific poison, just as is that of syphilis, and that the virus is capable of propagation only by the application of a portion of the pellicle, from an affected to a sound part, or from one person to another; that it is never communicated by volatile invisible emanations, susceptible of being dissolved in the air, and of acting at a great distance from their point of origin."

Dr. Bartholow had endeavored to prove this an incorrect representation of Bretonneau, by reading a paragraph from page 178 of the Sydenham Translation; but the quotation has not the least reference to the the point at issue. It is upon another subject. And the speaker would show the accuracy of the postulate

by language from Bretonneau that is unmistakable. On page 176-7, of the same volume, we read as follows: "I insist on this point, because it is to this second process of transmission of variola, that we must refer the mode of transference in Diphtheria; for, undoubtedly, the air is not the vehicle in the latter case. Innumerable facts have proved that those who attend patients, can not contract Diphtheria, unless the diphtheritic secretion, in a liquid or pulverulent state, is placed in contact with a soft or softened mucous surface, or with the skin, on a point denuded of epidermis, and this application must be immediate."

"The atmosphere can not transmit the contagion of Diphtheria * * * * * Being transmitted only by inoculation, the diphtheritic virus is propagated by peculiar means, which it is important to understand * * * * * It is true, Diphtheria possesses a method of transmission which is common to it and Syphilis, and, moreover, it is true, that the relations of the Syriae and Neapolitan diseases are so intimate, that in a nosological classification, these two diseases would be allied together."

On page 184, we have more on this same subject: "I have stated that the Egyptian disease is not communicated by volatile invisible emanations, susceptible of being dissolved in the air, and acting at a great distance from their point of origin. It no more possesses this property than the syphilitic disease. If the liquid which issues from an Egyptian chancre, as visibly as that which proceeds from a venereal chancre, has seemed, in some circumstances, to act like some volatile forms of virus, the mistake has arisen from its not having been studied with sufficient attention; the appearance has been taken for the reality."

Again, Dr. Bartholow had affected surprise at the fact, that the speaker had given the title of the New Sydenham Society's Translation, and the date and place of its publication in full, and asked why the speaker had not done so with all the other writers to whom he had referred?

He would reply, that it was eminently proper that he should do as he had done with the Sydenham Translation, for it is the very best work on the subject of the definition of Diphtheria that there is, embracing, as it does, the views of Bretonneau, and of several others of the most eminent French writers, who have studied this disease very closely.

As to his having been more brief with some other authorities, whom he had named in his paper, he would say, that the writer

of an article is not in any way bound to give all writers, whom he quotes, an equal prominence.

* * * * *

He had now read over nearly all of the paragraphs from Bretonneau, which the gentleman had adduced, to prove that the speaker had misrepresented Bretonneau, and had shown that they do not conflict, in the least, with the views presented in his paper, as belonging to Bretonneau; and he could go on to show the same, as to the rest of his quotations. But he would now leave the defensive position, and proceed to give some more proof that his definition of Diphtheria is correct. What is Diphtheria? is the great question in this debate. Dr. Bartholow said that Dr. W. B. Davis and myself are alone in the view, that Diphtheria means epidemic sore throat, and "that we look down upon other members of the profession from the big end of a telescope." The speaker would show, that he and his brother are not alone in this view, and that all the distinguished special students of the subject of Diphtheria, are of this same view.

Bretonneau uses the term, epidemic sore throat, as a synonym for the word Diphtheria, on page 140 of the Sydenham Translation. He says, "On the 1st of January, 1826, seventeen persons had already been attacked with *epidemic sore throat*, and as not one had escaped death the resolution was at last taken to convey those who were affected with the malady to the General Hospital. Out of twelve persons admitted in succession, three died." This passage occurs in a description of a diphtheric epidemic; and this clause is put as a part of the description of the epidemic. Bretonneau, to show that Diphtheria is not a new disease, gives what he calls a "History of Diphtheria," and as this is simply a history of epidemics of sore throat, we have further proof that by Diphtheria he only meant epidemic sore throat.

Trousseau, Empis, Guersant and other eminent Frenchmen, whose articles on Diphtheria are given in the Sydenham volume, are followers of Bretonneau on this subject.

From English and American sources we have but three or four monographs on this disease, including the very able article in the *British and Foreign Medico-Chirurgical Review*, of January, 1860.

The speaker said, that he held in his hand a copy of one of these few monographs. It is the prize essay by Dr. Daniel B. Slade, an authoritative work. On page 16 of his book he says: "Under the term Diphtheria, Bretonneau, however, has connected

several affections, which, in the prevailing nosology, are separated from each other by a wide interval. This point will demand from us special consideration. How far his description of Diphtheria is to be considered a faithful representation, how far it is to be taken as a universal type of the disease, are questions only to be answered by a careful comparison of the accounts of "Epidemics of Sore Throat" or "Angina," which have invaded various portions of the world, at longer or shorter intervals, particularly in the last two centuries. On making such comparison it will be found that they exhibit marked differences in their characteristic symptoms and dangers, having been frequently regarded as different diseases. We shall, however, not only be satisfied of their identity—a fact so well established by Bretonneau—but also of the common character by which this identity may be recognized, viz., the existence of the exudation of false membrane."

Here Slade proposes to try Bretonneau's teachings "by a careful comparison of the accounts of 'Epidemic Sore Throat' or 'Angina.'" And if he did not regard it as a recognized fact, that Diphtheria and "Epidemic Sore Throat" or "Angina" are one and the same thing, this proposition would be absurd.

It is also to be remarked that the first sentence of this quotation shows that Slade takes it as an undisputed conclusion that Bretonneau uses the word Diphtheria as a *generic* term. The same is, however, manifested throughout this paragraph.

On page 16 we have him again using the term "Epidemic Sore Throat" as synonymous with Diphtheria; and on page 49 he does the same.

Greenhow, the eminent English writer on epidemics, in his book on Diphtheria, takes the same view, that Diphtheria means "Epidemic Sore Throat," (or Epidemic Angina), and that it is a *generic* term. On page 13, we read, "It would, perhaps, have been better to have retained the English name "Epidemic Sore Throat," or the older term "Angina," as the *generic* term of such epidemics, but as the word Diphteria is now in ordinary use for one form of the disease, I shall employ it as a *generic* term for the entire epidemic. The following description will, I trust, be found sufficiently comprehensive to include every variety of the disease, from that of mild epidemic sore throat, to the severest forms of malignant Diphtheria." On page 16 of his book, he begins the history of epidemic sore throat, as the history of Diphtheria. On page 27 and 65, of the same volume, we have descriptions of

epidemics of sore throat, to show the character of the disease Diphtheria. The speaker said that such references could be multiplied.

But he would now pass from Greenhow, to *The British and Foreign Medico Chirurgical Review*, of January, 1860. This journal is one of our highest standards, and this article ranks among its best articles. The speaker said that it fully corroborates the view of his paper, that "epidemic sore throat" is Diphtheria; and that Diphtheria is a *generic* term. The article is on Diphteria, and begins on the first page, of the number of that journal for 1860.

The reviewer compares Bretonneau to Hope, Royer, Laennec, Corvisart and many others, "who have been the first to break ground, each in his special field of Pathology; the like honor being due, he says, to M. Bretonneau, of Tours, for his admirable investigation of the epidemic disease, to which he has attached the name of Diphtheritis." As to Diphtheria being a *generic* term the reviewer says as follows: "Profoundly impressed with the truth of the aphorism of Laennec, that diseases can only be certainly distinguished by their anatomical characters, M. Bretonneau based his inquiry exclusively on *post-mortem* investigations, and presented this line of research, so far as to arrive at the conclusion, with respect to *several* important *diseases*, previously supposed to have no relation to each other, that they are connected either by identity in their accompanying anatomical appearance, or by so complete a similarity, that they may be considered phases of the same morbid process." Nothing can be clearer than that this writer understands Bretonneau as using Diphtheria as a *generic* term, to comprise "several important diseases, previously supposed to have no relation to each other." On page 4, of this Review, is a further showing of this fact. It reads as follows: "Diphtheria is the *liaison* by which our author connects several affections, which, in the prevailing nosology of this country, are separated from each other by wide intervals." This reviewer, further on, says: "Successive, and even synchronous, *epidemics of sore throat* exhibit very marked differences in their characteristic symptoms and dangers, and have frequently been regarded as different diseases. Bretonneau established their identity on the firm basis of an historical comparison of the descriptions of former times, with his own more exact observations; and we consider this to be one of his most important achievements."

Thus it is seen, that Slade, Greenhow and the *British and*

Foreign Medico Chirurgical Review, have the same understanding of the definition of Diphtheria, as I have presented in my paper; that it is *epidemic sore throat*; and that the term, Diphtheria, is a *generic* term, including several diseases that were formerly supposed to bear no relation to each other. These three publications, together with the New Sydenham Society Translation, (from which I have freely quoted), together with Jenner, on Diphtheria, comprise the *whole* of our standard literature on the subject of Diphtheria. Jenner's book on Diphtheria I have not as yet succeeded in getting, as there does not appear to be a reprint of it in this country. But I have no doubt that I shall find Jenner to agree with the other standard writers.

One of the causes of the mistake of Dr. Bartholow, in his supposing that the term Diphtheria was not intended by Bretonneau as a *generic* term, to include all forms of epidemic sore throat, is his not understanding the true meaning of the terms, "*sui generis*," and "*specific*." He supposes that these terms in themselves, attached, as they are, by Bretonneau to his definition of Diphtheria, preclude positively the idea that he meant the name Diphtheria as a *generic* one. And possessed with this mistake, in his diatribe against the speaker, he had repeated, over and over again, these words from Bretonneau, (though he had only discovered them at a late period in the discussion), as conclusive proof that the speaker was wrong in his paper in defining Diphtheria as a *generic* term. To show the error of Dr. Bartholow, as to the proper meaning of these words, "*sui generis*" and "*specific*," he would give the fact that we group together a large number of affections under the *generic* name of Syphilis, and consider Syphilis as *sui generis* in its nature, and *specific* as to its mode of transmission. Under the term Syphilis we have syphilitic sore throat, syphilitic rheumatism, syphilitic lichen, syphilitic rupia, syphilitic psoriasis, etc.; all of these forms of diseases being both *sui generis* and *specific* in their nature. Thus it was that Bretonneau intended these terms in applying them to Diphtheria. And I have shown that this use is accepted by the other systematic writers on Diphtheria.

On pages 6 and 10, of the *British and Foreign Medico Chirurgical Review*, we have a summing up of Bretonneau's opinions, as follows: "It will be clear to our readers, that the treatise on Diphtherite is a nutshell, in which a valuable kernel of truth lies concealed, although somewhat difficult to extract. That kernel

we conceive to consist of two facts, that all the various forms of epidemic sore throat, which have prevailed at different times and different places, are identical, and that the common character by which this identity may be recognized, is the existence of the pellicular exudation."

The speaker said, that his views expressed in his paper perfectly agree with the conclusions of this reviewer, that there are not more than two kernels of truth in Bretonneau's teachings. And as to the first named, by the reviewer, "that all the various forms of epidemic sore throat * * * are identical," the speaker's paper fully accepts. But the second kernel, which the *British and Foreign Medico Chirurgical Reviewer* thinks he finds in Bretonneau's writings, "that the common character, by which this identity may be recognized, is the existence of the pellicular exudation," he does not accept so fully. He thinks, that in mild forms of the disease, exudation may not present at all, and that severe and violent blood poisoning from this disease may strike the patient down suddenly, without sufficient reaction being allowed to develop the exudation.

The speaker said that he had something before him in this review, which led him again to refer to Dr. Bartholow's attempt to attach ridicule to the statement in his paper, that the *article* on *Croup*, in the French Dictionary of Medical Sciences, by M. Royer Collard, was the result of the concours called by the First Napoleon. The speaker had already amply shown that such was the fact, but he would give the corroborative statement of this reviewer, as expressed on page 5 of the Review. It is as follows: "The article, 'Croup,' in the *Dictionnaire des Sciences Medicale*, (1812-22) may be considered as a *resume* of all that was original in the essays presented for competition. In this essay the ideas of Home, are but reproduced and enlarged; the details of the outline, which the genius of the Scotch physician enabled him to sketch, from so limited materials, are filled in by the author, M. Royer Collard, from the inconceivably vast records of observation placed at his disposal, as Secretary of the Commission."

The speaker said that he had before referred to the fact that, in the early part of this discussion, Dr. Bartholow had treated Bretonneau as an old author, who having written a treatise on Diphtheria, spent the rest of his life in writing memoirs to correct the mistakes made in this treatise. And when Dr. Bartholow did this, he attempted both to ignore my paper and Bretonneau,

as both treating only of obsolete issues. He then proceeded to quote Rousseau on Diphtheria, as being against the positions taken in my paper, and as being against Bretonneau. I have shown in the course of this discussion, that nothing which Dr. Bartholow presented from Rousseau was at all at variance with any thing I presented in my paper, or at variance with Bretonneau. The speaker said that he referred to this point now, from finding on page 7 of this review the following language, that Rousseau "is almost as much identified with Bretonneau's doctrines as if they were his own." The fact was, that Bretonneau and Rousseau always cherished for each other the kindest feelings, and Rousseau deferred to Bretonneau as his father in medicine, which he really was. Bretonneau's last memoir, written in 1855, on Diphtheria, was written, seemingly, with the main object of comforting Rousseau, who had just before met with a severe type of the disease that was uncontrollable.

Bretonneau died in 1859, one year before the article in the *British and Foreign Medico Chirurgical Review* appeared. He, therefore, did not live almost as far back as the Flood, as the remarks of some of the speakers in the course of this discussion, would lead some to infer.

Correspondence.

LETTER FROM PHILADELPHIA.

Visiting Europe for the Purpose of Observation and Study of Medicine.

EDITOR CINCINNATI LANCET AND OBSERVER.—Several of my friends having requested information on some points connected with the subject of studying medicine abroad, especially after having graduated or practiced in this country. I have chosen to offer some remarks on the subject of their inquiries, conveying the same through the columns of your journal.

Perhaps the first point to be considered is the length of time proposed to be appropriated to the purpose. In spending a few months, six or eight, little can be done in the way of study if

it is proposed to visit many of the cities of most note in England and on the continent; and unless one is acquainted with the French or German languages, one or both, it will be unsatisfactory, and not very profitable visiting on the continent, except to observe the construction and management of the hospitals. Hence my judgment, formed from observation, would be, in the case of a brief visit, and without a practical knowledge of the languages referred to, decidedly the better plan to spend most of the time, where there would be no inconvenience respecting the language, in England, Scotland, and for some branches, at Dublin.

If, however, a year and a half, two years or more can be taken, the case is somewhat different. Any one willing to study diligently, medicine and language at the same time, can acquire very much in one year, whether he may have a partial knowledge of the two principal continental languages, or not; if he has, so much the greater advantage. The German will require from six to twelve months close attention to make it available for the lectures and for translating. The French language can be made available, so far as translating, in, perhaps, a shorter period of time, presuming, always, that the student is attentive and faithful to his task, which is by no means a light one for the great majority whom I have met. The fact of the literature of the French language being more easily acquired, accounts, in part, at least, for our people being better acquainted with the French views and medical literature, than with the German, though, in my opinion, they are by no means of more value than the latter.

The comparative advantages of England, France, Prussia and Austria, is a question on which much might be said when speaking of the foreign student only, which is, of course, our present purpose mainly, and especially for Americans.

The study of the languages will then, we shall suppose, be decided by the amount of time at disposal. If it be a question between the French and the German, from what has been said, from the practical value of the German in the northern, middle and western portions of our country, if not in the south also, and from what remains to be remarked, it would seem to me of much more value to have a knowledge of the latter than of the former.

In England any one as a *visitor*, introducing himself as a member of the medical profession, or taking letters of introduction, is generally treated with much politeness, especially by the first men in the country.

In Paris all the lectures at the School of Medicine, and all the clinics are free to any one belonging to the profession, by procuring a permit of the city authorities which is never refused, and, in fact, without permit, with very few exceptions, foreign students may attend there for a year or longer, if they desire. That, I presume, would not be expected in England, probably nowhere else. That, together with the liberality of the French government toward strangers visiting their capital, attracts many to Paris.

In Germany any one attending lectures or clinics, regularly, is expected to take the tickets. Some of the professors, especially at Berlin, are very particular about this; others at Vienna are very liberal in this respect toward strangers, which has its influence in attracting more foreign students from various parts of Europe and America, than to Berlin. Every one taking tickets on some one or more special branches, does not find it desirable or convenient to take all the tickets, and yet feels desirous of attending certain clinics occasionally; but if it is once ascertained that strangers are not perfectly welcome, or are especially noticed, few will feel at liberty to repeat their visits, and all will very soon learn the fact. This is one of the differences understood by foreigners, between the two German cities, much in the end, I apprehend, to the advantage of Vienna.

The matriculation ticket is not sufficient, by any means, to admit you, though you may be a graduate of medicine in this country, to all the clinics at Berlin, a ticket of the professor or special permit being demanded at the door. There are honorable exceptions to this rule. This striking contrast to Vienna and Paris makes an impression.

Matriculation is a ceremony of little, if any, benefit; the fee, about four dollars and a half (gold), is a small sum, but the "red tape" of depositing your passport, and making application for it some time before you can get it, and paying a few times for having your name recorded, and procuring permission to leave, (matters so unheard of), that English and Americans avoid the office at the University altogether, unless they know nothing of it previously. By it, however, you obtain access to the libraries.

Private instruction in the general branches can be obtained in Germany more thoroughly and at less expense, perhaps, than in any other country. It is presumed that all who have taken a course of medical study in this country, are, or should be to a re-

spectable degree, familiar with anatomy ; but if a person desires to refresh his memory, he will find no difficulty in obtaining material, at a moderate expense, at any of the schools. At Berlin they have the finest anatomical rooms I have ever seen anywhere. At Vienna is the distinguished Hyrtel, whose lectures are of the most interesting and practical character. In physiology at Vienna, Brucke, at Berlin, Du Bois Reymond, at Paris, Claude Bernard, are masters in the profession, and from whose instructions some of the Americans have made themselves distinguished.

Pathology, as taught in the German schools, has reached a degree unattained in any other country. Rokitansky and Klob at Vienna, and Virchow at Berlin, are now the leading teachers of Europe in this important branch of medical science. It is because there this branch has been made a separate chair, and because of the immense opportunities growing out of the systematic arrangement of those large hospitals, that these men have been enabled to collect facts from almost innumerable investigations, beyond what is afforded in other places. In this connection Prague should also be mentioned as being under the same general plan, and offering many rich opportunities. At either of the two great German schools, one may witness as many autopsies as he desires, by taking the tickets. At either place there are assistants to make or to aid in making the examinations. At Berlin there is given, perhaps, the most systematic *demonstrative course* of pathology to be found in any school. There is a course of a somewhat similar character, given at Vienna ; but none, so far as I am aware, that can be spoken of, under the same name, at any other city.

This demonstrative course is given during the winter and spring sessions, three times a week, and consists on Monday, of an autopsy made by one of the class, under the immediate direction and instruction of either the professor or one of the assistants. Every part is carefully examined with instructions how and what to observe, and how to describe what is seen, and the nature of the pathological changes met with in the individual organs. On Wednesdays and Saturdays, the viscera and other diseased portions, or morbid growths from the autopsies, made during the intermediate days, are sent into the lecture room which is provided with tables on which the specimens, after having been described and illustrated on the blackboard, is passed from one end of the room back and forth, till all have had an op-

portunity of observing what has been described. Many of the students take notes of the description, and a copy of the colored drawing as given on the broad. Next comes a portion of the morbid specimen in the microscope, passing in a railroad on the table as the original had. This is the best course I saw anywhere, and is largely attended.

Microscopy is taught with much attention at both these schools. There are rooms fitted up for the convenience of students, who desire to give special attention to that study. The assistants also give courses, and at Vienna they are especially attentive to giving information in the examination and preparation of various healthy, as well as morbid specimens. The material for examination of rare as well as common pathological changes is afforded at the Pathological Institutions of Vienna and Berlin, in greater amount and variety than at any other city. There is also a course given at Paris, by M. Cornil, at which much may be learned.

Dr. Lionel S. Beale, at Kings' College, London, who is second to none, at this time, in microscopial investigation, if, indeed, he may not be considered the first, has the chair of Physiology, and General and Morbid Anatomy in that school. His lectures are given three times a week, during winter, and twice a week, during the summer session. Any one studying in London might avail himself of his lectures.

One word on *Microscopes*: A person having a good *working instrument* had better take it with him. A poor one, or a bad stand, is not worth the trouble of carrying. Hundreds of stands sold and used in this country, mostly imported, are almost worthless, either at first, or after a little use, when any thing like exactness of observation is desired. A very good instrument with objectives Nos. 2, 4 and 6, giving a power of as high as 550 diameters, can be had for \$50, (gold), at Paris, of Hartnack, C. Verick, or Nachet. I prefer the two former. They send instruments to the Pathological Institutions at Vienna and Berlin, which is the best proof of quality as well as cost; my own experience and observation correspond with it.

In *Surgery*, speaking generally of operations and of success, London stands pre-eminent. At the large hospitals the operations are performed in the afternoons, and are so arranged, that one may attend some one of them every day in the week. St. Bartholomew's, Guy's, King's College, University College, London

Middlesex, Charing-cross and St. Thomas', are among the largest and most interesting, though the number is very large. Resections of elbow, shoulder, knee and hip joints, are common operations. I saw at least six of the knee, and seven of the hip; how many more I do not remember. The great majority were either out of danger or doing well. Their major operations are eminently successful. The two latter operations are comparatively rare on the continent. I saw none in Paris, during the winter, nor in Germany, during my visit. It is well understood that the patients in England recover to a larger per cent. from the more serious operations, than on the continent.

Lithotomy is also a common operation in England. In Paris there was but one case of which I heard or saw, during the winter. The operation is more frequently witnessed in Germany, especially at the Clinic of Prof. Langenbeck. These remarks apply entirely to public clinics.

Fractures are, as a rule, better treated in England. Plaster-of-Paris is applied to a less extent there, than in Germany, and extension and counter-extension is in much more frequent use than in Paris, in treating fractures of the lower extremities. In amputations and general operations, the English apply a smaller amount of dressing, and provide for, and expect, union by first intention.

Antiseptics are also in much more general application. At Paris the visit is made in the morning, after which the operations, two or three times a week, with clinical lectures, take place. One may attend the visit at one, and the lecture and operations, at another of the central hospitals, very conveniently every day, and thus follow up the result of interesting cases. The same liberty was scarcely attainable at Berlin. The Surgical clinics being connected directly with the hospitals at Vienna and Berlin, can be attended, on that account, without considerable loss of time, in passing from one building to another, a matter of no small importance.

Medicine.—In Vienna, Prague and Berlin, are offered the greatest advantages for personal examination of patients by members of the class in all diseases of the chest. Especially is this true at the two former cities, where much attention is given to teaching practical diagnosis, as well from physical signs as from chemical and microscopical means; and at the same time, due attention is given to pathology and post-mortem examinations. Little can be done in the application of the theory, in

Paris, except by comparatively few, because of so little being done in private classes, while at the German cities every facility is afforded to strangers, at very low fees.

In *Obstetrics*, properly speaking, the department under the supervision of Prof. Carl Braun, connected with the General Hospital at Vienna, stands first. In number of patients, general management and ventilation of the buildings, opportunities and facilities for teaching, and in success, all taken into account, it must be regarded as the greatest in Europe. Foreigners receive marked attention and favor. Next should be mentioned, in this connection, Prague, Berlin and the Lying-in Hospital at Dublin. These are the largest, and offer the greatest facilities for instruction, practically. Paris offers to foreigners comparatively little in this branch. In England most of the privileges in this branch are restricted to students connected with the hospitals, taking regular courses; and most of the patients are attended at their homes. The Nightingale Ward, in connection with King's College Hospital, has been abandoned.

Of the Surgical diseases of females, much may be seen at London in a few weeks, at the female clinics and wards of Prof. Greenhalgh at St. Bartholomew's, and at some of the other hospitals; but for operations especially, most visitors call on Spencer Wells, and Baker Brown. It must not be understood, however, that there are no clinics for these diseases, medical and surgical, at the other cities mentioned; there are, and very rich ones, both at Vienna and Berlin, especially the former, but not equal to London. In this, as in other branches of surgery, the English are bolder, and seem to have better results.

Special Branches.—Ophthalmic medicine and surgery are taught in all the great cities. At the Royal London Ophthalmic Hospital, there is a clinic followed by operations every day, in the forenoon. Operations may be witnessed, or a course may be taken. At Paris there were four or five courses given during the winter, to which all were invited.

M. Desmarres, Jr., has a large clinic every afternoon, followed by operations in cases presenting for operation; and during the winter, he gives a very good course, three evenings in the week, on the diagnosis and treatment of diseases of the eye. M. Fauvel's clinic, with the use of the laryngoscope, is frequented by nearly all foreign students visiting Paris. The remarks already made in reference to private classes in the general branches

apply, in an eminent degree, in nearly all the special subjects. In these two, as well as in others yet to be mentioned, the Germans surpass in teaching. For studying *venereal diseases*, as well as for *cutaneous affections*, Vienna affords the greatest facilities for the foreign students; and the ability of Sigmund in the former, and Hebra in the latter branch, needs only a mention to be recognized by the profession. At the same place a course is given in Heller's Laboratory, on the examination, chemical and microscopic, of urine normal and abnormal, brought from the wards of Prof. Oppolser and others, considered with special reference to its value in diagnosis of disease.

While studying the more strictly scientific part of the profession, it is well not to forget that which is of the more common and practical nature. The *hospitals* of London, as a rule, are governed most creditably in a sanitary point of view. The wards are seldom if ever crowded; ventilation is freely provided by windows, and doors and open fire places; patients are well fed and very kindly treated, and the patients recover from the most serious injuries or formidable operations.

In Paris the wards are *over-crowded*, particularly in the large central hospitals; the ventilation is very imperfect, in some cases terrible; the beds are all surrounded with curtains, a great obstruction to the free circulation of air; diet frequently insufficient in the more nutritious articles; antiseptics and antiseptics comparatively little used; and the patients do not bear the more serious operations well. The Lariboisiere is an exception to most of the remarks, especially in reference to ventilation, it being a model in most respects, and erected at great expense. Some of the others should be excepted, as the Beaujon.

The new Rudolph Hospital at Vienna is much larger than the Lariboisiere. Cost much less in its erection, and has a ventilation complete. A large portion of the old general hospital at Vienna, has been recently remodeled and furnished with the same system of ventilation, much to the credit of the faculty, and to the benefit of the patients.

The English *students* are the most polite class to be found anywhere; orderly and respectful in their bearing, and quiet during the lectures and clinics, they seem to feel under obligation to conduct themselves as gentlemen. The German students at Berlin would rank next in respect to observance of order, and are decidedly stiff and formal. The French students are the roughest

and most destitute of any thing like order, of any class I have ever seen. At the commencement of the winter session, they made such a noise and general disturbance, the professors could not lecture for a week. During the operations they crowd around the patient, within the enclosure, and climb on the chairs to such an extent as to make it oftentimes almost impossible to see any thing. The most remarkable is that it is tolerated by the professors. M. Jarjaney does prevent in part.

Boarding and rooms are cheapest in Germany, and most expensive in England.

My two years were divided, sixteen months in Germany, six months in France, and the remainder in England. Some others have followed nearly the same course.

Many subjects remain unmentioned, others have been but briefly noticed, and the mention of great men has not been one of the objects of this article; hence the names of many of the most distinguished of the profession, who will be seen, heard and visited, do not appear here. Other questions on which there may reasonably exist a difference of opinion, have also been omitted—left for each to decide for himself after observing.

Respectfully Yours,

H. Z. GILL.

LETTER FROM DUBLIN.

DUBLIN, July 16th, 1868.

EDITOR LANCET AND OBSERVER.—I should hesitate to become a correspondent of your's while in Europe, through doubt of my ability to write you anything likely to be new or of interest to your readers, did I not reflect that almost every one sees or hears something that others failed to observe, or, at any rate, to record. Besides, much of what has already been published in the journals and elsewhere, will bear being repeated. I shall then give you, in a gossipy kind of way, a brief sketch of persons, places and things, connected with the profession here, as I found them; and you shall judge whether my observations are of sufficient interest to your readers to be worth publishing.

Landing at Glasgow, I commenced my observations in that city, by visiting the Royal Infirmary, which contains five hundred and eighty beds, and is the only hospital at present there.

It is a fine building, or rather a series of buildings, arranged in a hollow square. I was disappointed in not seeing Mr. Lister during my stay in Glasgow, but had the pleasure of meeting others of the Infirmary staff. Through the kindness of Prof. Gardner, I was enabled to see the old University of Glasgow, soon to be replaced by a magnificent structure at the west end of the city, which is now well advanced toward completion. In connection with the new University there will be a fine hospital. The old one contains the far-famed and justly celebrated Hunterian Museum, which, in itself, affords enough of interest to repay any one for a visit to it.

The Royal Infirmary at Edinburg is the only important hospital of that city, and is a very fine one. Here I saw Prof. Spence resect the elbow joint; but, as at Glasgow, I failed to see the chief surgical celebrity of the place, as Sir James Syme was absent in London at the meeting of the General Medical Council.

The Scotch, as you are aware, have been the most enthusiastic advocates of carbolic acid in the dressing of wounds, and have carried its application to rather remarkable lengths. This is particularly the case in Glasgow, where Dr. Watson showed me ulcers, lacerations, incised wounds and burns, which he was treating with it. In burns, of which they have a great many from the coal pits, he uses it in the proportion of one part of the acid to nine of olive oil; and speaks very highly of its efficacy. In Edinburg, however, I thought I saw indications that the tide of its popularity was beginning to ebb. For there they have discontinued the remarkable practice of washing clean cut surfaces, as after amputations, with solutions of it. In Dublin it was used for years, before the great *furore* arose in its favor in Scotland; but the surgeons here have never carried its use to the same lengths as they have in the Scotch hospitals. The blistering treatment in rheumatism continues to meet with favor in Glasgow.

In Dublin there are very many hospitals, but none of them of any considerable extent; usually ranging from eighty to a hundred and thirty beds. Those I have visited are Mercer's, the Meath, Adelaide, Mater Misericordia, Richmond, Hardwicke (fever), Whitworth, Rotunda Lying-in, Sir Patrick Dun's and Steevens'. At the Richmond, which is an exclusively surgical hospital, it was my good fortune to meet the veteran surgeon of Dublin, Mr. Robert Adams, now seventy-six years old, but still

full of life and vigor. He is well known through his articles on the Joints, in Todd's Cyclopaedia of Anatomy and Physiology, and his work on Chronic Rheumatic Arthritis, besides other publications. In this hospital I also met Dr. Stokes, Jr., and Dr. Robt. Smith, the author of the work on "Fractures and Dislocations in the vicinity of the Joints." On the occasion of one of my visits to the Richmond, I heard Dr. Smith lecture on Pathology, his favorite subject.

At the Hardwicke Fever Hospital, close to the Richmond and Whitworth, I met Drs. Lyons and Gordan, who kindly showed me their cases; but there was not a single one of "spotted" fever among them—Dublin being uncommonly exempt from the disease at present. Among the patients was one convalescing from Cholera, and who had had all the prominent symptoms in a most decided degree, as profuse rice water discharges, violent cramps and vomiting, with the blueness and corrugation of the integuments of the hands. Dr. Lyons mentioned that he had heard of two or three other cases of the disease recently.

My visit to the Meath Hospital, the field of Grave's labors and observations, was a very agreeable and interesting one. Here I met Dr. Stokes, and I need not tell you who he is. Among the cases, he was kind enough to show me, was one of fever, to which Morphia had been administered the night before by hypodermic injection. This was done for the relief of long continued wakefulness, and with perfect success. It was the first experiment of the kind in a fever case. Dr. S., and other gentlemen here, of whom I inquired on the subject, stated they never had any unpleasant result in the way of sloughing, following the hypodermic injections, probably, because they don't resort to it in the cases of broken-down subjects, in whom any puncture would be likely to excite sloughing. They confine themselves, also, to a simple aqueous solution of the salt, not using any proportion of alcohol as a solvent. Dr. Porter, President of the Royal College of Surgeons, Ireland, Dr. Macnamara, its Vice-President, Dr. Maurice H. Collis and Dr. Strong, all members of the Surgical Staff of this hospital, I also had the pleasure of meeting. I may remark that the Dublin surgeons, generally, are M. D.'s. These gentlemen received me very kindly and courteously, showing me all interesting cases, etc., and, indeed, they treated me so handsomely, that I shall always look back to my visit to the Meath, as one of the pleasantest of my life. I felt very proud of the way

in which they spoke of our countrymen, for many of whom they expressed a very high esteem. Professors Wood and Gross, of Philadelphia, they particularly extolled ; and spoke in high terms, also, of the works of Prof. Hamilton and Dr. Bumstead, of New York.

Dr. Collis, author of a recent work on Cancer, is quite an enthusiast on the subject of cleft, palate and harelip, for which deformities he operates on the youngest children, as he finds he can give them chloroform, and keep them under its influence during the operation without difficulty. The horse hair suture is the favorite one here ; possessing, as is claimed for it, the non-irritating properties of wire, and being as easily removed as silk. At the Meath I saw a few operations performed during my visit, but not of sufficient importance to merit a description.

I am indebted to my friend Dr. Barton, one of the surgeons of the Adelaide Hospital, for the favor of seeing every thing of interest in that institution, and of being present at a couple of his operations. The Adelaide contains one hundred beds, is supported altogether by voluntary subscription, and is one of the finest of the Dublin hospitals.

With the famed Rotunda Lying-in Hospital, I must confess, I was somewhat disappointed, as I found its wards fuller, both of patients and furniture, than the well-being of such an establishment will, in my opinion, permit. But, as you know, it affords a grand field for the study of midwifery and diseases of women. I found three American physicians resident in it, who are making these branches a special study.

All medical men visiting Dublin go to see the College of Surgeons, of course, and I did likewise. Its fine halls, ornamented with paintings and busts of the eminent men of the profession of Dublin, who have passed from the stage, are in themselves of great interest ; but it is the superb museum which will attract the visitors attention chiefly. I can not attempt a description of it, will only add that I was particularly struck with the exquisite injections of many of the wet preparations, some of them mercurial, and the series of preparations illustrating the various periods of utero-gestation—commencing with the embryo fourteen days (supposed) after impregnation, and progressing to the end of the full period. Many of the dissections in comparative anatomy, exhibited here, were of so delicate a nature, as to require being done under water. Among other specimens in the pathological

division, I was pointed out the bones involved in the first resection of the knee-joint, performed many years ago by the late Sir Phillip Crampton. I was fortunate in meeting Dr. Barker, the curator of the museum, for by his courtesy I was enabled to see the specimens to much better advantage than I otherwise could have done.

Of course I saw the man of all others in Dublin at present, the most prominent in Surgery. I mean Dr. Butcher, until recently the principal surgeon at Mercer's, but now attached to Sir Patrick Dun's Hospital. As by all other gentlemen of the profession I have met here, so by him, I was received with kindness and consideration. Indeed, I think all American physicians who come to Europe, and fail to visit Dublin, aside from what she presents of strictly professional interest, miss a great treat in withholding from their brethren here an opportunity of greeting them in their whole-souled, cordial, Irish fashion. At the hospital Dr. Butcher showed me his sixth case of resection of the knee-joint, which he operated on some ten weeks ago, and in which the union is now firm. All six of his cases have been successes, which is a record hard to beat in Jersey or anywhere else. He keeps the limb perfectly straight, in a long box with hinged sides; as he says, any attempt to get union with any bend, so much diminishes the chances of success, that he is satisfied with the straight limb, rather than take the additional risk in the attempt to improve on it.

From the hospital I went with him to his residence, where he showed me his private museum—a monument to his industry, talent and taste. It is made up, in great part, of plaster casts of almost every form of surgical disease. Many of them are very beautifully colored, and far superior, to my mind, to any wax models I ever saw. Some of them are casts of the abdominal and thoracic viscera, and are colored and finished in a manner I supposed impossible with plaster of Paris. And all this is his own individual work. While viewing this truly wonderful collection, I felt I was in the presence of a giant.

I intendent to have mentioned other matters in this letter, but I find it has already reached such proportions that I can not think of adding any more to it. I hope to attend the meeting of the British Medical Association, at Oxford, next month, and may send you some account of what I may see there, as well as in London.

T. H. K.

LETTER FROM EDINBURGH.

DR. MURPHY—*Dear Sir:* I most humbly apologize for my neglect in not having written you before this. Your kindness to me has not merited such treatment, but I hope you will pardon me and not ascribe it to ingratitude.

I attended, during the winter session, the clinical lectures at the Infirmary. During the first half of the session they were delivered by Dr. Hughes Bennett, and during the latter half by Dr. Laycock. I was very much pleased with Bennett's lectures; they were plain and practical. His system of teaching also seemed to me to be excellent. He had a list of all his fourth year students, and whenever in his rounds he came to a new patient he would call out one of the students and make him examine the patient, give his diagnosis, and the reasons for it, and suggest the treatment to be adopted. Then followed a severe criticism, and it was seldom that the student escaped without a reprimand. The resident physician, and the clerks also, frequently came in for censure on account of carelessness or neglect. These examinations were made four days in the week, and were exceedingly instructive, not only to the student examining, but to those looking on, for they could profit by his mistakes. The other two days were devoted to clinical lectures on the cases under observation at the time.

Bennett has some rather singular ideas in regard to mercury, very much at variance with those of most regular physicians. He not only disapproves of its use in inflammations, but in diseases of the liver, and even in secondary syphilis. He says that since the less frequent use of mercurials in the latter disease those frightful tertiary symptoms, such as the corona veneris and cones of the nasal and palatine bones, are not nearly so common; in fact, he would lead you to suppose that disease of the bones, following syphilis, is due more to the effects of the mercury than to the effects of the syphilitic poison; and in his last lecture delivered a most earnest appeal to the students, urging them to give up mercury as a medicine, and characterizing it as one of the greatest banes which has ever cursed the human race. In regard to its use in diseases of the liver, he denied that there had ever been any positive proof, that it either increased or diminished the hepatic secretion, and that, therefore, we were not justified in using it as a remedy in these complaints. A series of experiments are being now conducted under his supervision, in

order to prove what effects the mercurials have upon dogs. Believing fistula an established and sound preparation of mercury administered. The amount of bile secreted before and after its administration is then noted. Up to the present time in no single case has the secretion been increased. A report of these experiments is to be laid before the British Medical Association, at its next meeting, and, I suppose, it will be published in the transactions of that body.

Laycock is a very tiresome man ; abounding in theories of no practical value. His appointment to the chair of Practice of Physic, is considered a great mistake.

You have of course heard a great deal of the treatment of wounds with carbolic acid. I have seen it used here under Syme, one of its strongest advocates, and, although beneficial, I do not think that its success will justify his statement that it completely prevents suppuration. I have seen it used also by Spence and Watson, but they, while admitting its beneficial effects, do not hold the same sanguine views as Syme and his son-in-law, Lister.

When I first went through the wards of the Infirmary, they reminded me very much of those in the old Commercial, ill-ventilated and so low in the ceiling, that if a window was let down, some poor wretch would, in all probability, be seized with Bronchitis or some other itis. They have at last resolved to build a new hospital, and the funds for its erection are pouring in from all quarters and in remarkably large sums. One lady gives £5,000, and many subscriptions amount to £1,000.

I attended a class in Microscopy conducted by Dr. Rutherford, Dr. Bennett's assistant. He seemed to be a very efficient person, and made the class quite interesting. It included, besides Microscopy, other subjects connected with Practical Physiology, experiments upon the nervous system of the lower animals, demonstrations of the heart's action, with the use of the Sphygmograph, etc.

There is a good deal of talk here as to who will get the position of Principal of the University, left vacant by the death of Sir David Brewster. Sir James Simpson and Prof. Christison are the prominent candidates. Christison is the favorite in Edinburgh, and I think throughout Scotland. He is regarded as being more gentlemanly and dignified than Sir James, besides he has been longer connected with the University, and should have priority. I met him frequently, during the winter, at my uncle's

house, when he attended in consultation with Dr. Alexander Wood, my uncle being at that time ill with Typhus Fever. I was very much pleased with him. He has a most intelligent countenance, and a quiet confident manner, which tends to inspire confidence in others. Their treatment of my uncle was different from the treatment of fevers in the States. For upward of two weeks he got nothing in the shape of nourishment but wine and brandy, and this treatment was pursued while he was quite delirious.

There were but few American students here this winter. I do not think that either the Edinburgh or the London schools, will ever compete favorably with Paris in attracting foreign students. The difference in the charges is very great, and the gaieties of the French capital are so alluring.

My reception here has been exceedingly kind, and my stay so pleasant that I have scarcely had an excuse for homesickness. However, I expect to be back in America about the end of July.

J. C. M.

EDINBURGH, June 3d, 1868.

NO-MATTER-WHERE, August 15th, 1868.

MESSRS. EDITORS.—One of your correspondents, apparently grieved, thus writes:

"Suffice it to say, this is a very wicked world." Truth is wholesome, come from what quarter it may. Some very quickly apprehend it, others "au contraire." Some are so selfish, so prone—cattle-like—to look downward, that they never see stars, until they are "knocked in the head."

Many would not believe, though "one rose from the dead," unless the resurrection could be made available to them. Apply to some for mental aid, a pseudo aphasia serves them. Intimate that material aid would be serviceable, and at once right or left hemiplegia attacks them, until the applicant is out of sight.

Truly this is a wicked world, negatively and positively. The descendants of Adam, and the descendants of Gescupalius, not only present the "cold shoulder" to one another, but actively strive to trample upon one another. Excuse me, I will take another track.

I don't know, but I fear I have caught the "cacanthes scribenda." Some of my "colleagues" are badly exercised with it, and it may be catching.

Lately there has been a buzzing among the B's, and still more recently a conflict has taken place, involving more or less of the honey accumulated! These B's belong to the same hive, whereby said hive has been thrown into great commotion, fearful of utter destruction; and, consequently, an edict has been published to the effect, that however much certain B's may delight in war, the hive unanimously declare—the two B's excepted—that conflict must cease! Again, consequently, by presumption, no more honey has been emitted—not even wax to this date!

It may be there are two many bees in the one hive, and the whole thing may result in the question, "Two B's or not two B's?" which, you perceive—I mean all included in quotation marks—is a liberal use of Shakespeare.

Wishing success to all laudable efforts for the purification of the medical atmosphere, and pitying the infirmities of those who sail under false colors,

I remain,

OBSERVER.

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

The following selections are taken from the *Journal of Anatomy and Physiology*, Nov., 1866.

This periodical is published semi-annually; is liberally and beautifully illustrated with wood cuts. The first number contains one hundred and eighty-eight pages, besides the plates. It is made up of original articles from the best anatomists and physiologists of the age—reviews and selections. Besides the citations which I give below, this number contains, in the department of Ophthalmology, an article on the "*Anatomy of the Cornea*," by Dr. Lightbody, and another on the "*Retina of Amphibia*," by Mr.

Hulke, which, of themselves, are worth more than the price of the journal for one year. The value of this periodical, to all those who wish to keep themselves posted in the rapid progress now being made in these elementary departments of our profession, can not be overestimated.

E. W.

Niemetschek (*Prager Vierteljahrsschrift*, 1st Part, 1866), describes a fine capillary network in the Macula Lutea of the Retina, which is often described as non-vascular. His injections were made in the eyes both of children and adults.

The Anatomy of the Fovea Centralis of the human Retina is described by J. W. Hulke (*Proc. Roy. Soc. London*, June 14, 1866). The fovea is a minute circular pit in the inner surface of the retina, its edge is the most raised part in the macula lutea where the retina is thickest, its centre the most depressed part where the retina is thinnest. At the centre of the fovea the structures from without inward are as follows: Bacillary layer and outer limiting membrane, a little finely areolated connective tissue, the inner granule-layer and ganglionic layer very attenuated, a thin granular band containing optic nerve fibres and the internal limitary membrane. The arrangement of these structures is then detailed, and various deductions as to the physiology of the part, are based on these structural differences.

An elaborate paper on the Anatomy and Physiology of the Retina, is given by Max Scultze (*Archiv f. Microsk. Anat.* Bd. 2). Prof. Scultze, who has already contributed so much to our knowledge of this difficult piece of anatomy, employs perosmic acid, which he finds a material particularly useful for bringing out the characters of the retina. The "cones" and "bacilli" forming the outer sheet of the retina (Jacob's membrane), are found to present a close resemblance to nerve-fibres, and are judged to be the perceptive elements; the light passing through them, and being reflected back upon them from their outer or peripheral parts, which differ from the rest in structure. The cones (Zapfen) are alone present in the axial or yellow spot of man and ape; but over the rest of the retina the bacilli (Stabeben) exist in greater proportion than the cones surrounding them, so that two or three bacilli are placed between every two cones. In animals moving about in twilight or gloom, as owls, bats, moles and hedgehogs, there are no cones; whence it is inferred that the

latter are perceptive of the quality of color, and the bacili of the quantity of light. In birds (owls excepted) the cones preponderate over the bacili, reversing the relative proportions that are found in man and most mammals; and they have, in the outer part of the inner division of each, a circular spot or nucleus, which, in most instances, is of yellow, or red, or deep ruby color. Among reptiles the chelonians resemble birds; lizards and serpents have only cones, some presenting the yellow pigment spots like those of birds. In Amphibia the bacili are large and thick, the cones small with a faint yellow or colorless spot in each. Osseous fishes have cones and bacili like ordinary mammals. Rays and sharks, however, resemble bats and owls in being devoid of cones. Many other points are discussed—the structure of the outer layer of the retina, its developments, etc.; indeed it is a very elaborate valuable paper and copiously illustrated.

Hermann, of Berlin (*Reichert and Du Bois Reymond's Archives*, No. 1, 1866,) has been investigating the effects of Anæsthetics upon the blood. He finds that chloroform, ether, alcohol, chlorocarbon, amyl, chlorethyl and its chlorine substitutes, ethyl, methyl, and amyl alcohols, nitrous oxyde and olefiant gas, all possess a property hitherto ascribed to ether and chloroform only; they dissolve the blood-corpuscles, leaving behind a colorless viscous granule representing the corpuscle. This is ascribed by Hermann to the action of the anæsthetic upon protagon, which according to him forms a considerable portion of the corpuscles (vide paragraph Blood). Protagon was discovered by Liebreich (*Annales de Chemie et Pharmacie*, No. 134.) to exist in nervous tissues in considerable abundance, and Hermann supposes that anæsthesia may be produced by the action of the anæsthetic upon the protagon in the brain. Although the blood-corpuscles are dissolved by an excess of the anæsthetic, such is not the case when it is inhaled, the quantity necessary to produce anæsthesia being too small to dissolve the corpuscles. Of course no definite conclusion as to the mode in which the anæsthetic acts can as yet be arrived at from this interesting research.

Dogiel (*Reichert and Du Bois Reymond's Archives*, No. 2, 1866,) from numerous experiments on rabbits and frogs, concludes that the contraction of the pupil in the first stage of chloroformization is due to the irritation of the cerebro-spinal centres, causing increased action of the circular fibers of the iris; and that the dil-

atation of the pupil when narcotism is complete, is not due to any irritation of the sympathetic, but to suspension of the function of the third pair. His experiments also support the theory of the inhibitive function of the vagus; he found that during the stage of excitement of the cerebro-spinal centers the heart's action was less rapid, and sometimes even stopped for a second or two, while during narcotism the action was much more frequent, the decrease being due to irritation, and the increase to diminished function of the vagi. He divided the vagi, and then gave chloroform to complete anaesthesia, no change in the heart's speed was then observed.

Researches by Laschkewich on the Calabar Bean (*Virchow's Archives*, Feb., 1866,) confirm but do not add any important facts to those discovered by Frazer and Robertson. Special notice ought, however, to be taken of the fact that he entirely confirms Dr. Frazer's observation that when taken internally, as well as when applied to the conjunctiva, the Calabar Bean produces contraction of the pupil.

Editor's Table.

CINCINNATI HOSPITAL.—The annual report of this institution for the year ending March 1st, 1868, has been laid on our table, and from it we glean many items of interest. The Board of Trustees have given untiring zeal to the discreet management of the interests of the Hospital. The Board consists at present of Hon. C. F. Wilstach, Mayor, Dr. J. J. Quinn, Secretary, B. F. Brannan, F. J. Mayer, Dr. David Judkins, John Carlisle and M. Straub. And the following constitute the Staff: *Physicians*, Drs. C. G. Comegys, John Davis, John A. Murphy, John F. White; *Surgeons*, Drs. W. H. Mussey, H. E. Foote, W. W. Dawson and W. Clendenin; *Obstetricians*, Drs. M. B. Wright and George Mendenhall; *Oculists*, E. Williams and W. W. Seeley; *Pathologists*, W. H. Taylor and R. Bartholow.

There were two thousand four hundred and fifty-six patients in the Hospital during the year, the daily average being one hundred and eighty-eight. There were one hundred and seventy births and one hundred and fifty-seven deaths, including still-born children and deaths of infants; this makes the mortality less than six per cent., a highly favorable result when the circumstances are considered. Nearly nine hundred patients were surgical cases. How available this Hospital is made for clinical purposes is shown in part by the large amount of valuable clinical reports which have found their way into this journal. We notice that during the past year more than three hundred medical students were in attendance on the clinics.

The magnificent new edifice, now fast approaching completion, will be occupied by patients in a few weeks. It is already the admiration of every beholder, and will continue to grow in importance to the city as our great medical charity, and to the profession for its great and increasing advantages for medical education.

COLLEGE MATTERS.—Profs. Austin Flint, senior and junior, and Prof. Foster Swift have resigned their respective Chairs in the Long Island College Hospital. Dr. Thomas Bevan, formerly of this city, has been appointed to the Chair of Public Hygiene in the Chicago Medical College; and Dr. J. P. Ross has been appointed to the Chair of Diseases of the Chest, in Rush Medical College.

MEDICAL JOURNALS.—The Messrs. Appleton & Co., of New York, have become owners of the New York Medical Journal and the American Psychological Journal, and will continue their publication.

THE HALF YEARLY COMPENDIUM OF MEDICAL SCIENCE.—Part II of this American enterprise has been received, and presents us with a vast amount of matter, largely of a practical character, such as will be of interest to physicians. The editors, Drs. Butler and Brinton, and their co-laborers, have aimed to give more especial prominence to the contributions of American periodicals,

but we notice with pleasure that the important contributions of foreign journals are not overlooked. In all, we note four hundred and twenty separate articles. To our taste the page is too large for pleasant reading, and we think the double system of numbering the pages will be found inconvenient, and likely to be dropped. In the surgical department we observe Cincinnati has a prominent place. Prof. Foote's successful case of Ligation of both Carotids, and cases from Prof. Blackman, Dr. Dawson and Dr. Williams, have due prominence given them. We hope this undertaking will so command the favor of the profession that it will prove remunerative, and enable the proprietors to make it the most valuable publication of the kind in the world. Price \$3 a year, or \$5 for *Lancet and Observer* and *Compendium*.

THE CRAIG MICROSCOPE.—We have received one of those beautiful toy microscopes from the manufacturer, Mr. George Meade, of Racine, Wisconsin. The price is only \$2 50, and the construction is exceedingly simple, and yet its magnifying power is really quite wonderful. It shows the tubular structure of the hair, the animaleculæ of stagnant water, and a great variety of like objects of minute creation. It has, therefore, a great deal of positive value, and introduced into the family circle becomes the means of endless amusement and instruction. Mr. Meade prepares a great variety of objects mounted ready for microscopic examination, which he sells for twelve and one-half cents each. The microscope and objects can be safely sent to any place by mail.

DR. S. B. CONOVER.—Several years ago this talented medical gentleman was engaged with us in one of the Military Hospitals of this city, where he acquitted himself honorably, and made many friends. Since the close of the war he has been in Florida, and in the "reconstruction" of that State, we see he has been made State Treasurer. Strictly honorable and correct in all his deportment and relations in life, we congratulate the doctor on his advancement, and the State on a good officer.

PROF. THADEUS A. REAMY.—By the annual announcement of the Starling College, we are pleased to see that the management of that school has had the good taste to create a Chair of Puerperal Diseases and Diseases of Children, and has appointed Dr.

Reamy, of Zanesville, to fill it. We congratulate our friend Dr. Reamy, and the Faculty of Starling, on this fit association. Dr. Reamy has been giving special attention to this department of medicine for some years; he is an attractive speaker and a gentleman. He will make an acceptable teacher in this important chair. Dr. Reamy was Professor of Materia Medica in the Cincinnati College of Medicine some years ago, and was regarded as an excellent teacher of Therapeutics.

A NEW MEDICAL JOURNAL.—The *California Medical Gazette* makes its appearance as a new candidate for the professional favor, especially of the Pacific slope. It is beautifully printed on heavy paper, has twenty-four large double column pages, and is well and carefully edited. We regret that no responsible name floats at the editorial mast head—there is a peculiar pleasure to us in associating editorial names and their labors. The *Gazette* is issued monthly by A. Roman & Co., of San Francisco, at \$5 a year.

NEBRASKA STATE MEDICAL SOCIETY.—We are indebted to our old friend and neighbor, Dr. J. C. Denise, formerly of Dayton, for a copy of the Proceedings of the Convention organizing the Nebraska State Medical Society. The convention was held in Omaha, June 24th ult. Dr. G. C. Monell is elected President; R. R. Livingston and N. B. Larsh, Vice-Presidents; J. C. Denise, Corresponding Secretary; S. D. Merceer, Recording Secretary; and D. Whittinger, Treasurer. We do not doubt the working fraternity of this new Giant of the West will make their State Society a power in the land.

THE PROSPECT.—Judging by one of the usual indications, we shall have an unusually large class in the Miami Medical College this winter. We also learn from the Dean that there are like probabilities for a large attendance at the Medical College of Ohio. We hope students will come early, be on the ground promptly, get ready for work, and ask no leave of absence until the end of the session.

INDIANA STATE MEDICAL SOCIETY.—We have received the Transactions for 1868, and have read them with interest. The medical relations between Ohio and Indiana are peculiarly inti-

mate, they almost seem to be the same State. We always feel greatly at home at the meetings of the Indiana Society, and read their transactions with a lively interest and pleasure.

The annual address of the President, Dr. J. S. Bobbs, gives a pleasant historical review of the Society from its foundation eighteen years ago. Dr. Bobbs, however, proceeds to discuss in detail some of the early objects of the State Society in a manner somewhat to our unsophisticated astonishment. Thus, for example, he considers the relations of medical journalism to professional progress, and, as we infer, arrives at the conclusion that Indiana should not foster a home journal. He makes not the slightest allusion to the fact that an excellent medical journal is issued from his own city; he has no word of encouragement for it—indeed no one would suspect from the address that any such publication had an existence. What's the matter? So, too, on the question of medical colleges, the President's address discourages an Indiana school—and we think wisely, but scarcely for the reasons he presents; and his special eulogium of one particular school seems to us rather out of taste, and something Rip Van Winkleish.

Dr. Sutton, of Aurora, contributes an excellent paper on Cholera; Dr. Hibberd on the Pathology of Diphtheria; Dr. Kersey concludes the Indiana Biliary War; Dr. Lomax has a report on Surgery which calls out interesting cases from a large number of practitioners throughout the State; Prof. Parvin on Diseases of Females is chiefly historical; Dr. Mears on Placenta Previa; Dr. Ayres on Idiotic Children; Dr. Field on Cholera; Dr. Weist, Prize Essay on Cerebro-Spinal Meningitis. The whole concludes with the proceedings of the sessions. We have not time at present to give the character of the papers, and only remark that they exhibit care and research, and we therefore congratulate our neighbors on their success.

HEAVY INFANT.—Dr. Gruwell, now of Iowa, but formerly of Ohio, writes: "A few days ago I was called to assist Dr. Owen, of this city, in a difficult obstetrical case. Mrs. Y., age nearly forty-eight years; the mother of ten children: quite healthy and well formed. After ten hours labor she was delivered of a dead child weighing, when wrapped in a small blanket, eighteen pounds. I think this *remarkable*. What is the heaviest on record?"

J. P. G.

MEDICAL CHEMISTRY.—The second article of Dr. Hough came to hand too late for this number; it will appear next month.

Reviews and Notices of Books.

The Institutes of Medicine. By Martyn Paine, A. M., M. D., LL. D., Prof. of Institutes of Medicine and Materia Medica in the University of New York. Member and Corresponding Member of various learned Societies, etc., etc.

All are but parts of one stupendous whole,
Whose body Nature is, and God the soul.—*Pope.*

Theory is only common sense applied to calculation.—*La Place.*

Eighth Edition, revised. New York: Harper Brothers, 1867.

The magnificent achievement before us, contains the labor and brains ordinarily spread over the construction of a whole library of medicine. Indeed the faithful student of this volume will have the results of extended reading embracing the whole range of medical research and literature. Several years ago we endeavored to present the readers of the *Lancet* and *Observer* a somewhat complete analysis of the writings of Dr. Paine, as embraced in the Institutes, Commentaries and other smaller volumes; we will, therefore, not enter upon that work, however pleasant it would be at this time. Indeed, when a work of the character of Paine's Institutes, has reached its eighth edition, it ceases to be particularly a fit matter for critical remark; and the most that seems called for, is to announce a fresh revision. We may, however, be permitted to say, that we know of no book in our language which gives evidence of such extended learning. In the recent editions Prof. Paine has made no material modification of the text; but the additions and improvements are in the form of *notes* following the index. As our author does not accept many of the recent teachings of medicine in its operations, it will be well for medical thinkers to buy and study this work, to learn what views are held by this great scholar. For sale by Robert Clarke & Co. Price, \$5.

The Anatomy and Histology of the Human Eye. By A. Metz, M. D., Prof. of Ophthalmology in Charity Hospital Medical College, Cleveland. Philadelphia: Published at the Office of Medical and Surgical Reporter, 1868.

We have been delighted in the examination of this very beautiful book, by our friend Prof. Metz. Our author states that he found serious deficiencies in the works on this subject, so that he was unable to select any suitable text book for his classes, much of the results of the labors of recent histologists being scattered through ophthalmological journals and special memoirs. It seems to have been the aim of the present work to collect all this material into a connected form, and to adapt it to the requirements of the practicing physician, as well as the medical student.

The letter press is most excellent, and it is freely illustrated with well executed wood cut engravings. We congratulate Dr. Metz on his successful attempt at authorship; and thank Dr. Butler for the first class manner in which he has acquitted himself as a publisher. The old publishing houses of Philadelphia must look to their laurels. We advise all those interested in ophthalmological studies to buy this work. For sale by Robert Clarke & Co. Price, \$2.50.

A Theoretical and Practical Treatise on Midwifery, including the Diseases of Pregnancy and Parturition. By P. Cazeaux, revised and annotated by S. Tarnier. Fifth American from the seventh French edition. By Wm. R. Bullock, M. D., with one hundred and seventy-five illustrations. Philadelphia: Lindsay & Blakiston, 1868.

Cazeaux' Midwifery has justly come to be regarded by the profession as a classical work, and we have but little to say beyond presenting to our readers the announcement of this new and carefully revised edition. It is, perhaps, proper to state in this place, that the distinguished author was suddenly cut down by fatal disease in the full strength of years, and in the midst of a brilliant fame; and the seventh French edition, of which this is a translation, was prepared by Tarnier, adjunct Professor in the Faculty of Medicine. While we have every thing in the progress of Obstetric Art and Medicine, introduced by Tarnier in this edition, he has preserved the general character and teaching of the original work and teachings of Cazeaux. The volume is very large, and contains a vast amount of matter. It is published in the best style by Lindsay & Blakiston. For sale by Robert Clarke & Co. Price, \$6.50.

Business Notices and Acknowledgments.

NEW BOOKS.

PAINÉ—*Institutes of Medicine.* Harper Bros.

CAZEAUX—*Midwifery.* Lindsay & Blakiston.

ROBERTSON—*Ext. of Teeth.* Lindsay & Blakiston.

WHITE—*Dental Materia Medica.* S. S. White.

LOOMIS—*Physical Diagnosis.* R. M. Dewitt.

METZ—*Anatomy of the Eye.* Med. and Surg. Reporter.

KIDDER'S ELECTRO MEDICAL APPARATUS.—Dr. Kidder's apparatus is wellknown. His card appears in the *Lancet* and *Observer*, and if any of our readers desire to purchase, we shall be happy to forward their orders.

BRACHMANN & Co.—We made quite a mistake in our notice of the removal of this well known liquor house. We said the new building was 245 Third-street; we ought to have said 149 Third-street, between Race and Elm.

PALMER'S ARTIFICIAL LEG.—An order for sale at this office.

GRIMAULT & Co., of Paris, have their card in this journal.

A MICROSCOPE FOR SALE.—We have had left at this office, for sale at a low figure, a *Microscope*, made by a first class maker, but not in perfect order.

WANTED.—To fill a set, one or two copies of May, 1867, of this journal, for which twenty-five cents a copy will be paid.

OUR BOYS AND GIRLS.—This attractive weekly for little folks maintains its excellence. Parents will do well to bring such publications into the family; they cultivate good morals, love of study, and correct ideas of life. Lee & Shepherd, Boston, are the publishers.

HARPER'S MONTHLY is a remarkable evidence of the greatness and great reading taste of America. Otherwise no such wonderful success could have been attained.

To PHYSICIANS.—Location for sale in North Liberty, Knox Co., Ohio. Being a good dwelling house, good well, stable, and office, in a thriving little village. A good country surrounding, and a good pay; business amounts to two thousand dollars per year. For Sale on the most reasonable terms.

Address

J. M. McLAUGHLIN,
North Liberty, Knox Co., Ohio.

Obituary

At a meeting of the regular medical profession of Cincinnati, held June 26th, 1868, relative to the death of Dr. Charles Thornton, Dr. A. M. Johnson was called to the chair, and Dr. J. M. Tucker appointed Secretary.

On motion Drs. David Judkins, P. S. Conner and J. A. Thacker, were appointed a Committee to prepare a memorial of the life and character of Dr. Thornton, and the Committee were further instructed to present such memorial to the profession, through the medical journals of the city.

Dr. Thornton was born at Cleves, Hamilton Co., Ohio, July 28, 1832. His father, Dr. J. H. F. Thornton, being a physician for many years resident at Cleves. His mother was a daughter of Ex-President Harrison, and grand-daughter of John Cleves Symmes. After completing his academic studies at College Hill and Oxford, Ohio, he commenced the study of medicine under the instruction of his father, and received the degree of M. D., from the Medical College of Ohio, in 1855. The following year he spent as Resident Physician of the Commercial Hospital, at the expiration of which time he went to Paris, where he remained nearly two years engaged in professional study. Upon his return he located in Cincinnati, and was in active practice until the breaking out of the war. For a time he occupied the position of Demonstrator of Anatomy in the Medical College of Ohio. Commissioned August 27th, 1861, as Surgeon of the Fifth Regiment Ohio Volunteer Cavalry, (Colonel W. H. H. Taylor); he served with that command, until the time of his muster-out, August 31, 1864. As Regimental Surgeon, and under contract, his army life embraced a period of about four years, during which time, he was, for awhile, Senior Surgeon of Division in the Army of the Tennessee, and for some months on hospital duty in

Memphis. Returning home, with health much impaired, he did not resume practice until the latter part of 1866, after which time he continued in professional labor until his death, which occurred suddenly, at his father's home at Cleves, on the 22d June, last.

Of fine personal appearance, and a genial social disposition, an agreeable gentleman, a well educated physician, a modest, refined, generous man. Dr. Thornton possessed attributes of character that strongly endeared him to his friends; and your Committee feel it to be both their duty and their pleasure to remember him kindly, and to offer this brief sketch of his life to his professional brethren, that his name may be had in memory by them.

DAVID JUDKINS, M. D.
P. S. CONNER, M. D.
J. A THACKER, M. D. } *Committee.*

GEORGE GAMBLE, M. D., of Cincinnati, died in London on the 26th of June, of pulmonary tuberculosis, aged 30. Dr. Gamble was born and reared in this city, where his parents are well known; his father being one of our most prosperous business men. The doctor took his literary course chiefly at Western Reserve College in this State, and immediately after his graduation at Gambier, commenced his medical studies under the direction of Prof. C. G. Comegys, taking his doctor's degree at Bellevue Hospital Medical College, New York. For a few months after his graduation at Bellevue, he was engaged in service at the U. S. Military Hospital at Jeffersonville; after which he was elected one of the House Physicians at Bellevue Hospital, where he remained two years, gaining a large experience in the different departments of that extensive Institution.

When his services at Bellevue was completed he went abroad, and for a year and a half pursued his studies in Berlin and Vienna with uncommon ardor. He had purposed to spend considerable time in Paris; but his health began to fail, and symptoms of a rapid decline became manifest. Then studies were dropped, he hurried to Pisa for change of air and scene; but alas, too late! In less than five months he died—died while making a desperate effort to reach home, but his mother, sister and brother had reached him, and were present to console his last days.

Thus was cut short a bright and promising career. Dr. George

Gamble had labored long and successfully in preparation for a high position in our city. He had sought patiently through seven years to fit himself for the profession of his choice. Like a faithful son of Cincinnati he had availed himself of every opportunity to be worthy of her confidence.

From a child he was a professing Christian; was exemplary in his life, and his last days were brightened by a precious faith in his Redeemer. He was resigned to his fate, trusting, without wavering, in God; and his dying moments were without a pang or a struggle.

FRANCIS H. RAMSBOTHAM.—We have to announce the death of this eminent physician, who died on the 6th of July, in his 68th year. He was the son of an accoucheur in large practice, to which he succeeded. He was educated at the London Hospital and at Edinburgh, where he took his degree in 1822. He lectured with ability and success for many years at the London Hospital Medical School on obstetric and forensic medicine. His work on Obstetric Medicine and Surgery is everywhere known, and he also published some lectures in the medical journals. Of late he had been obliged, by ill-health, to give up practice and retire into the country.

DR. HERVEY ARMINGTON, recently deceased at Providence, R. I., was descended from Joseph Armington, who came from England in 1714. Dr. A. was born in Barrington, R. I., July 26, 1793. About 1812 he came to Cincinnati, studied medicine with Drs. Hough and Whitman, and, after completing his preparatory course, became a student in the Ohio Medical College, at the head of which was the late Daniel Drake, M. D. While pursuing his medical studies, to support himself and defray his college expenses, he set up soda fountains (the first, probably, in the West) in Maysville, Chillicothe, Cincinnati, Louisville and St. Louis. He graduated in 1822, and practiced in a small town near Cincinnati for five years, at the end of which time he returned to Providence. After trying several things, he resumed the practice of medicine, which he continued for the rest of his life with great success.

MIAMI MEDICAL COLLEGE OF CINCINNATI.

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THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

VOL. XI.

OCTOBER, 1868.

No. 10.

Original Communications.

ART. I.—*Medical Chemistry*—No. 2.—*A Systematic Course of Analysis for the Detection of the Elements of Normal Urine.*

BY J. B. HOUGH, M. D., Ridgeville, Ohio.

Though a course of medico-chemical analysis properly presupposes a previous practical course in general chemistry, the subjects of *Urinalysis* and *Toxicology* are, to some extent at least, exceptions to the rule; so that those who have not had, or can not have the benefits of a previous course of elementary analysis, should not despair of acquiring a valuable degree of proficiency in the chemical examination of urine, or the detection of poisons. Of course the writer only means that it is better to begin with these subjects, than not to begin at all. In the case of undergraduate students, especially, it is undoubtedly advisable to begin with general analysis.

As it would not be advisable to occupy the space of a purely medical journal with the details of an elementary science, we will proceed to give in plain and simple form, an outline of the course we have found best suited to the advancement of classes, and to the wants of the medical practitioner in relation to the subjects which may follow.

In the following table the numbers on the right of the page direct the analyst to the corresponding numbers on the left. The formula of the reactions are intentionally omitted to economize space. A list of the apparatus and reagents essential to the course, will be found below. The quantities of urine given,

are mentioned only as convenient amounts when they can be procured. Other tabular guides to quantitative urinalysis, examination of *abnormal urine*, *toxicology* and the use of the *microscope*, in the study of these subjects, will follow in succeeding articles. The analyst should carefully label each portion and product to correspond with the table, so as to avoid confusion and mistakes. Of course the analysis may be continued from day to day, to suit the operator's convenience.

TABLE I.—QUALITATIVE URINALYSIS.

1. About ten ounces of urine may be divided into two portions, and treated according to.....2.
2. *Portion A*, (about four ounces), is evaporated to dryness in a glass, porcelain or platinum vessel at 212° F., and the *residue No. 1*, exhausted with about an ounce of warm *alcohol*, (sp. gr. about .825) Filter.....3.
2. To *portion B*, (about six ounces), in a glass or porcelain vessel, add about a dram of *chlorhydric acid* (H Cl.), and set aside in a cool place for about twenty-four hours. Crystals of *uric acid*, ($\text{U}_4 \text{C}_10 \text{H}_4 \text{N}_4 \text{O}_6$), will probably be deposited on the top, sides or bottom. Test them according to.....11.
3. The alcoholic *solution No. 1*, contains urea, ($\text{H}=\text{C}_2 \text{H}_4 \text{N}_2 \text{O}_2$), (also traces of inorganic and coloring matter). Divide into two equal portions, C and D, and treat according to.....4.
3. The *residue No. 2*, contains the inorganic constituents, (also remaining traces of organic matter). The organic matter is to be destroyed by igniting the residue on platinum or porcelain at a red heat, until it fuses into a white mass, which is to be treated with about an ounce of boiling distilled water. Filter.....5.
4. To *portion C*, in a glass or porcelain vessel, add an equal volume of pure strong *nitric acid* (N O₅). The urea is precipitated in the form of crystalline rhombic plates of nitrate of urea (C₂ H₄ N₂ O₂, NO₅ HO.). (The precipitation is most complete from cold concentrated solutions). Preserve a sample if desirable.
4. To *portion D*, add an equal volume of hot saturated solution of *oxalic acid*, (C₂ O₃ HO.) After a time the urea separates in tabular, prismatic or radiated crystals of *oxolate of urea*, (C₂ H₄ N₂ O₂, C₂ O₃, HO.) Most complete when cold and concentrated.
5. The filtered *solution No. 2*, contains the *chlorides* of *sodium* and of *potassium*, the *sulphates* of *sodium* and of *potassium*, and

phosphate of sodium. The acids and bases of which are found by dividing the solution into three parts, E, F and G, and testing according to.....6.

5. The residue No. 3, contains the carbonates of *lime* and of *magnesia*, the phosphates of *lime* and of *magnesia*, and traces of silica. It is treated with *nitric acid*, ($\text{NO}_3 \text{ HO}_2$) (about half a drachm.)9.

6. To part E, acidified with *nitric acid*, add nitrate of silver. The chlorhydric acid is precipitated as chloride of silver (Ag Cl .)

6. To part F, acidified with *nitric acid*, add chloride of barium. Filter.....7.

6. To part G add *tartaric acid* or bichloride of platinum, and after the precipitate has fully formed, filter.....8.

7. The presence of *sulphuric acid* is demonstrated by the precipitate, which is *sulphate of baryta* ($\text{BaO} \cdot \text{SO}_3$).

7. To the filtrate left, after separating the precipitated sulphate of baryta, add an excess of ammonia, ($\text{NH}_4 \text{ O}$.) The precipitate formed, which is *phosphate of baryta*, shows the presence of *phosphoric acid*, (PO_5).

8. The precipitate, which is tartrate of potassa, or platinochloride of potassium, proves the presence of potassa.

8. The filtrate, after separating the potassic precipitate, is evaporated, and the residue ignited, when the *yellow flame*, or the characteristic spectroscopic reaction, demonstrates the presence of soda.

9. Effervescence reveals the presence of carbonic acid, (CO_2).

9. The insoluble residue is silica.

9. The acid solution No. 3 is divided into two portions, H and I, and tested according to.....10.

10. Portion H yields a precipitate of *phosphate of lime* on the addition of an excess of ammonia, thus showing the presence of *phosphoric acid*, (PO_5).

10. Portion I, exactly neutralized with ammonia, throws down its *lime* as carbonate. The filtrate remaining gives up its *magnesia* as *ammonio-phosphate of magnesia*, on the addition of *phosphate of soda*, ($2\text{NaO} \cdot \text{HO} \cdot \text{PO}_5$).

11. Collect a portion of the crystals and dissolve them in solution of potassa, ($\text{KO} \cdot \text{HO}_2$); re-precipitate them by an excess of chlorydric acid. The product is comparatively pure crystallized uric acid.....12.

11. Treat another portion with strong nitric acid. Evaporate to dryness, cool and add ammonia. A fine purple color, (murexide= $C_{12}H_6N_5O_8$,) is produced.

12. Place some of the crude, and also some of the purified crystals, on a glass slide, and note their appearance in the microscope under a power of fifty to one hundred diameters.

12. Examine also, microscopically, any other sediment that may have been deposited in *portion B*, as well as the crystals of nitrate and oxalate of urea, from *portions C and D*.

Having thus detected the elements of normal urine, their presence should be *confirmed* by the use of any additional tests that may be thought necessary. Once having become familiar with the rationale of the above, or any similar course, the intelligent student will readily discover shorter roads to the different points of knowledge of which he is in search; so that the above is given as a guide to those only, who may not be in possession of a better system.

The following list of apparatus and reagents embraces all that is desirable for the above course. A moderate amount of ingenuity, however, will dispense with many of them by extemporizing substitutes. For example, a tumbler may take the place of a beaker; a saucer may answer for an evaporating dish, etc.; while the microscope and spectroscope are only mentioned as valuable collateral aids.

Three or four glass beakers, 2, 4 and 6 oz.; one porcelain evaporating dish, 4oz.; one small water-bath; one platinum, foil, or crucible; a small lamp furnace; one small funnel; one-half doz. test tubes; a couple of glass stirring rods; filter paper; small pipette; distilled water; alcohol, 92 per cent.; concentrated nitric acid; cone. chlorhydric acid; saturated solution of oxalic acid; aqua ammonia; liquor potassa; saturated solution of tartaric acid; 10 per cent. solutions of nitrate silver, chloride of barium, bichloride of platinum, and phosphate of soda.

No. 3.—*On the Examination of Urine Supposed to be Abnormal.*

The following tabular guide will be found both convenient and sufficient for the examination of any specimen of pathological urine. It must not be supposed, however, that the points of abnormality enumerated in the table, embraces *all* that can ever occur. Efforts often defeat their object by attempting *too much*; and the

student who once becomes familiar with this, or some similar course of analysis, will have no difficulty in the investigation of anomalous cases. In enumerating the conditions that may arise in each successive step as they are numbered on the left, the normal is always placed first. Unless obvious reasons should forbid, the whole quantity of urine passed in twenty-four hours should be intimately mixed, and the sample for analysis taken from the mixture. Especially is this advisable until the fourth step in the analysis has been reached. To give the *modus operandi* of each step in the analysis, would be to burden this article with elementary details, for which it was not intended. The trouble with the beginner is not so much *how* he shall do, as *what* he shall do. If he merely wishes to test for some one item of abnormality, as albumen or blood, for instance, his course is plain enough; but should he receive a specimen of urine from some unknown source, and be required to give an opinion regarding it, he will find that a *systematic course* is his only reliance.

TABLE II.—FOR ABNORMAL URINE.

1. The <i>quantity</i> is considered within the normal range	2.
1. The quantity exceeds the normal amount.....	2.
1. The quantity is less than normal.....	2.
2. The <i>specific gravity</i> ranges from 1015 to 1030*.....	3.
2. The sp. gr. is below 1015.....	3.
2. The sp. gr. is above 1030.....	3.
3. The <i>reaction</i> is acid	4.
3. The reaction is neutral.....	4.
3. The reaction is alkaline.....	4.
4. By one or two hours repose at ordinary temperatures, it may be separated by decanting or filtering into.....	5.
5. A <i>liquid portion</i> generally transparent.....	6.
5. A more or less voluminous solid or semi-solid <i>deposit</i>	14.
6. <i>Color</i> light to dark amber.....	7.
6. Colorless or nearly so.....	7.
6. Highly or unnaturally colored.....	7.
7. To one drop of urine on a glass slide, at a temperature of about 60°, add one drop strong nitric acid.....	8.

* From a large number of observations of normal urine, I am satisfied that the range from 16 to 26 is too limited.

8. It begins to crystallize in five to ten minutes, indicating about the average per cent of urea*. 9.
 8. It begins to crystallize in less than five minutes, indicating more than the average per cent of urea*..... 9.
 8. It does not begin to crystallize within ten minutes, indicating less than the average per cent of urea*..... 9.
 9. The urine when boiled gives *no precipitate*..... 11.
 9. Boiling produces a precipitate..... 10.
 10. The precipitate is dissolved by nitric acid.....
 *Excess of phosphates.*
 10. The precipitate is insoluble in nitric acid..... *Albumen.*
 11. Trommer's test (boiling with an equal bulk of liquor potassa slightly tinged with sulphate of copper), yields no precipitate 12.
 11. Trommer's test gives a heavy copper colored precipitate....
 *Sugar.*
 12. Pettenkoffer's test (sugar and sulphuric acid) gives only a red or reddish brown color..... 13.
 12. Petenkoffer's test gives the characteristic violet color.....
 *Bile or some of its derivations.*
 13. A portion of the clear urine may now be submitted to any special tests, for the detection of any anomalous conditions or substances that may be suspected. Thus the odor may reveal putrescence or the presence of turpentine for example, while various articles of medicine, etc., may be sought for by their appropriate tests.
 14. Boiling a portion of the sedimentary urine, produces no decrease in the amount of sediment..... 15.
 14. By boiling, the sediment is wholly or partially dissolved, and may be reprecipitated by chlohydric acid..... *Excess of urates.*
 15. The sedimentary urine is now to be submitted to careful microscopic examination, using for each test a single drop on a clean glass slide, and examining with a good achromatic instrument, with a power of 100 to 500 diameters. If the urine is normal, the microscope will reveal nothing but epithelial scales, mucus shreds and corpuscles, with occasional foreign bodies, such as fibers of lint, etc., accidentally present. If the urine was acid, and had stood for several hours, a few crystals of uric acid will generally be present as a normal sediment. If it was strongly

* These tests have been found sufficiently accurate for practical purposes.

acid and very high colored, and indicated *excess of urates*, by the 14th test, the sediment will reveal an excessive number of crystals of uric acid, and crystalline and amorphous urates of various forms. Prismatic stellate, radiate or pennate crystals of the triple phosphates, may be expected if the urine was neutral or alkaline, especially if the 10th test indicated *excess of phosphates*. Look for the characteristic crystals of oxalate of lime, (often present after eating freely of pie-plant). *Calculi* of various kinds and sizes may be present; those of *uric acid* are soluble in liquor potassa, while the *phosphatic* dissolve in chlorhydric acid. With a power of 200 to 300 examine carefully for pus, corpuscles, blood disks, spermatozoa, oil globules, fungoid cells, casts and sloughs from uriniferous tubules, etc. Finally collate the evidence obtained by the different steps of the analysis. If contradictions or incongruities appear, errors in some part of the analysis may be inferred. These should be revised and corrected, so that the work will harmonize throughout.

ART. II.—*Treatment of a Fractured Rib.*

By DR. J. C. McMECHAN, Cincinnati.

In the present state of surgery it is not deemed advisable to elevate a depressed rib. Erichsen says, "Any displacement that may exist, usually remedies itself without the necessity of the surgeon interfering. If, however, a portion of the rib continues depressed, it had, I think, better be left so." The one grand object in the treatment of a fractured rib, is to prevent undue motion of the broken bone, so that the pleura or lungs may not be injured, or an inflammation set up in them. But how is this movement of the ribs to be controlled? Most surgeons have come to the conclusion, that to bandage the chest with a broad flannel roller, or to "apply a roll of adhesive plaster round the chest," are the best means of attaining this end.

One surgeon recommending the latter form of dressing says, "the plaster must be about a foot in width, and should be sufficiently long to make one and a half turns round the body. It should be applied very tightly, and may be left on for ten days or a fortnight, when it may require re-application. It supports the chest more firmly and evenly than an ordinary bandage, affording the patient great comfort."

If there are ribs fractured on each side of the chest, we will not argue but this is the best dressing; but it seldom occurs that such a fracture takes place, it being usually confined to one side.

The fracture occurring on one side, the patient is to be placed in the sitting posture. Three strips (supposing one or two ribs to be broken), of adhesive plaster sufficiently long to reach half round the body, (from the vertebra to the sternum), and two inches and a half in width, are to be prepared. The patient is to "hold his breath" whilst these strips are being applied. One is to be placed directly over the fractured rib, extending from the vertebra to the sternum, and in the same direction as the rib. The other two pieces are to be placed diagonally across this one. The first piece will have a tendency to unite the fractured ends of the rib, and the three pieces together will so compress the one side of the chest, that little movement of the ribs will take place on that side in respiration. We have tried this dressing only in one case, but found it to be much better than the roller dressing.

On August 15th, Miss G. B——, whilst taking a drive on Spring Grove Avenue, was thrown from the buggy and had two ribs broken on the left side—the sixth and seventh true ribs. On first seeing the case we applied a roller bandage, which gave the patient but little relief. On visiting her next day we applied the dressing previously described, which gave her almost instantaneous relief from the pain felt on respiration. The fractured ribs have united nicely, and there is very little depression left, which at first was well marked. The patient was of course kept in bed during the treatment.

We claim for this the advantage, over other forms of dressings, that it relieves the pain felt on respiration more effectually, and at the same time tends to unite the fracture as well as any other dressing yet proposed.

Our remarks are based on but one case, but we ask those practitioners meeting with this form of fracture, to give the dressing described a trial at least.

ART. III.—*Fungus Hermatodes.*

BY J. L. WYLIE, M. D., Ripley, Ohio.

Mr. Struve, German, aged 66, consulted me in September, 1867, concerning a tumor of the arm; posterior aspect immediately above the elbow-joint. The tumor presented nothing peculiar in appearance, especially nothing of a malignant character. It had increased slowly for some time, until it had acquired the dimensions of a hen's egg. At his request I removed the tumor, September 17th, 1867, after having placed him under the influence of chloroform. The appearance of the growth was that of a fatty tumor, and of a consistence similar to those growths. The wound kindly healed, and it was supposed the cure was final, until in December it began to reappear in consequence of a stroke upon the cicatrix. It was again removed and found to be of a semi-fluid consistence, so much so that the finger only was used in removing it. In the course of two or three days after its second removal, it began to reappear, assuming a decidedly malignant appearance, growing with the rapidity characteristic of fungoid disease, and bleeding upon the slightest touch. It was now manifest that the case was one of *fungus hermatodes*, and that the most proper course of treatment would be amputation, which was recommended. By the advice of friends, as well as of myself, he sought further advice and placed himself under the care of an eminent surgeon of Cincinnati, who removed the already considerable growth, and resorted to the use of escharotic conjoined with an alterative and tonic course of internal medication. By this mode of treatment the local disease was kept in abeyance for some two or three months, and the general appearance somewhat improved, which previously had been rather cachectic. After this interval he returned to my care, and continued the local and general treatment until convinced that further delay would be hazardous, from the suppuration of the extensive surface caused by the repeated application of the escharotic as well as the continued reappearance of the growth. I accordingly advised amputation as the *dernier resort*, and at his request amputated the arm immediately below the shoulder-joint on the 23d of May, chloroform having been administered by Dr. Woodward, Dr. Gould assisting me in the operation.

May 24th. Rested comfortably during the night; pulse seventy;

secretions normal; no action of bowels since operation. Ordered enema of castile soap-suds.

May 25th Slight action of bowels; secretions normal; pulse eighty; the wound presenting a healthy appearance. Cold water dressings to stump since operation.

June 1st. Discharge from stump unhealthy in appearance, and of offensive odor. Ordered a lotion of acid carbolic, gtts. xv.; water, $\frac{3}{2}$ ii.; to be used three times per day.

June 10th. Wound kindly healing; pus laudable. The general appearance of the patient decidedly improved, with no indications of the recurrence of the disease.

September 1st. The condition of the patient's health is certainly much better than before the operation. The cachectic appearance has measurably vanished, and no indications whatever of returning disease.

The above was in very many aspects a very unpromising case, and one which the surgeon might well shrink from, in view of their fatality in general. Enfeebled by age, as well as the force of disease, cachectic in appearance, and apprehensive in mind, the surgeon could not flatter himself with a successful termination of the case. Should there be sufficient energy of system to react from the effects of the operation, there would be an avoidance of the Scylla of shock, with the risk of the Charybidis of consecutive inflammation, and more remotely the dangers of returning disease. After the lapse of some days after the operation, severe pulmonary trouble displayed itself by violent cough, purulent expectoration, oppressive breathing, etc.; in fact strong evidences of approaching or present phthisis. These symptoms, however, subsided under the influence of severe and continued pustulation of the chest by means of the Unguent tart. The successful termination of the case I attribute both to the removal of the *nidus* of the disease, (the growth), and the vigorous use of tonics and alteratives whereby the pabulum or *essentia morbi* is counteracted.

ART. IV.—*Fractures.—Eight Cases.*

By J. B. OWSLEY, M. D., of Jacksonsburgh, Ohio.

CASE I.—FRACTURE OF RADIUS AND Ulna.—S. P—, aged 7 years, fell from a horse, fracturing both bones at the junction of

the middle and lower third, obliquely, producing great deformity, throwing the bones back at almost a right angle; the soft parts fortunately were uninjured. I administered chloroform and adjusted the fracture, applying binder's boards, roller and two splints, so arranged as to press on the interosseous space. At the end of five weeks removed dressing; very little trace of the fracture; supination and pronation unimpaired.

CASE II.—FRACTURE OF TIBIA.—Miss L. M.—, aged 16 years, fully developed and muscular; while taking horseback exercise, the saddle turned and threw her whole weight on the left foot, fracturing the tibia, obliquely, at its middle. Applied fracture box recommended by Dr. Neill, adhesive strips, roller, binder's boards and four short splints, to keep the fragments in apposition. Removed dressing at the end of six weeks; limb perfect.

I may here add, that chloroform was administered in this and the subsequent cases with the happiest results. I have yet to witness any bad effect from its administration.

CASE III.—FRACTURE OF CLAVICLE.—M. B.—, fracture at the middle, oblique. Dressing wedge shaped pad in the axilla and roller, as recommended by Dr. Gross. Removed dressing at the end of the fifth week. Union complete; deformity slight, scarcely perceptible.

CASE IV.—FRACTURE OF FEMUR.—John W.—, aged 11 years, thigh fractured at the middle, obliquely, shortening one and three-quarter inches; caused by the wheel of a loaded wagon passing over the limb. Applied a modification of Sir Charles Bell's double inclined plane apparatus, adhesive strips on each side of the leg from the knee down, fastened to a bolt with an eye on the inside of the foot board, and a burr and screw on the outside. By this arrangement extension and counter-extension could be kept up, and the pressure of the heel prevented entirely. I used also three splints the length of the thigh, and by them kept the bones in apposition. At the end of the fifth week the dressing was removed; result satisfactory.

CASE V.—TRANSVERSE FRACTURE OF THE PATELLA.—W. L.—, aged 45, patella fractured by the kick of a horse. The case was well marked by the displacement of the upper fragment. Applied

apparatus recommended by Prof. Hamilton. At the end of the seventh week I could discover no trace of the fracture. I was satisfied that bony union was complete. I saw the case three years afterward. It was like Dr. Waldo's man that had the glass eye inserted—*Which patella?* would have been as pertinent as Dr. W.'s "Which eye is it?" Passive motion of the joint was steadily kept up after twenty days. Discharged at the end of ten weeks.

CASE VI.—FRACTURE OF TIBIA ONE AND A HALF INCHES BELOW KNEE-JOINT.—S. G——, a farmer, aged 55, robust health, fell from a load of hay ten or twelve feet. I was convinced, on examination, that the head of the tibia was fractured transversely about one and a half inches below the knee-joint, and also vertically dividing the bone into three pieces. The displacement of the lower fragment was slightly inward. There was no shortening. Applied tin case as recommended by Dr. Gross. Violent inflammation followed with threatened gangrene. The pain was so severe that chloroform had to be administered, when passive motion was commenced. Removed dressing at the end of the sixth week. No ankylosis. Use of the limb good.

CASE VII.—COMPOUND, COMINATED FRACTURE OF THE TIBIA AND FIBULA.—Adam, a teamster, aged 40 years, good health, fell between the wheels of his wagon, the hind one, with tire three inches wide, passing over his leg two inches above the ankle, crushing the bones the width of the tire. The limb was two and a half inches shorter than its fellow, and the injury to the soft parts was of such a character to warrant amputation; but I determined to pursue a conservative course. Applied Dr. Neill's fracture box, adhesive strips to hold the limb steady and keep up slight extension. Bandages were dispensed with, and cold water dressings used. The wound healed kindly, and at the end of eight weeks removed the fracture box. About one-fourth of an inch difference in the length of the limbs.

CASE VIII.—FRACTURE AND RE-FRACTURE OF THE FEMUR.—On the 28th of January, 1867, was called to see D. W——, a man of 25 years of age, muscular system fully developed. The accident occurred while felling a tree.

On examination I found the point of the fracture about two

inches above the junction of the lower and middle third of the femur. The shortening was two and a half inches, which convinced me that the fracture was oblique. I administered chloroform, and applied a double-inclined plane splint, a modification of Sir Charles Bell's, having a foot board, with a burr and bolt; the bolt having an eye for the fastening of the adhesive strips. On the plan recommended by Dr. Swinburne, with the aid of the burr and bolt, I could keep up uniform extension and counter-extension. On the fifty-eighth day after the accident he carelessly caught his foot in the carpet, which threw him to the floor with sufficient violence to re-fracture the bone. I readjusted the fracture and pursued the same course of treatment as heretofore. At the end of the tenth week removed dressing entirely; I had, however, kept up very little extension and counter-extension, after the end of the sixth week. I dismissed my patient *without the least perceptible shortening*.

In conclusion, I would say that my experience teaches me that fractures of the femur should be examined and measured daily, for at least three weeks.

Medical Societies.

Proceedings of Cincinnati Academy of Medicine.

JOHN DAVIS, M. D., PRESIDENT, J. L. NEILSON, M. D., SECRETARY.

Report of the Section on New Remedies and Pharmacy.

BY J. S. UNZICKER, M. D., Chairman.

Dr. Unzicker read the following report on New Remedies and Pharmacy:

Bimeconate of Morphia in crystals has lately been introduced by Messrs. Rosengarten & Sons, of Philadelphia, and was first brought to this city by the old and reliable house of Allen & Co., to whom the profession here are indebted for its early appearance West. It is more soluble than the sulphate, and will, on that account, be well adapted for hypodermic injections.

Belladonna and Atropia in equivalent doses, says Dr. Harley, have the same action. Atropia acts the same, whether taken by the mouth or injected under the skin; only by the latter method its action is more rapid, and is found in the urine eighteen

minutes after the injection of $\frac{1}{4}$ th of a grain. Therapeutically, belladonna may be considered, first, as a diuretic; second, as a means of increasing the oxidizing process within the body; third, as a direct stimulant to the sympathetic nervous system. It is peculiarly useful as a cardiac stimulant, in this respect surpassing all other medicines. One-hundredth of a grain of sulphate of atropia, given subcutaneously, is sufficient for this.

Physostigmin., the active principle of calaberg bean, has lately found its way here. It was introduced in Germany some years ago, by E. Merck, of Darmstadt, but has not been used internally as far as we know. The extract of the calaberg bean, however, has been used by oculists for several years for contracting the pupil of the eye.

Mustard Plaster.—B. J. Crew, of Philadelphia, has introduced a portable mustard plaster, spread on paper, which it is said retains the properties of mustard, and is far more convenient, undoubtedly, than the old fashioned plaster heretofore in use.

Pieric Acid has been found very useful as a substitute in Intermittents, and Barconnot and Calvert have confined its activity in two grain doses. As a remarkable fact it may be noted that the pierate of quinia is without any effect in periodic fever.

Oleum Santalum Album.—This oil has long been used as an adulterant of Otto of Rose, and some years ago was introduced in England as a substitute for Ol. Capaibæ. Lately it has been used in this city in several cases of gonorrhœa, as reported, with good success.—*Druggist's Circular*.

Carbolic Acid.—Dr. E. R. Squibbs, our celebrated pharmaceutical chemist, states. (*Med. Gazette*) that some of the applications of carbolic acid are really but revivals of old methods of practice; thus creosote has a very deservedly high reputation as an application to burns, and as carbolic acid is, medicinally at least, identical with creosote, it is but changing the name of the agent. In my own person I have experienced its benefits, and once tried the following experiment: Accidentally scalded by a jet of steam; a solution of carbolic acid, which is kept constantly on hand for such purposes, was at once applied on a piece of lint, before the pain became severe. In two or three minutes the pain was gone. In an hour the dressing was removed, and the pain then returned: The dressing was renewed and the pain again ceased, but to return again when the dressing was removed. This anodyne effect has not been explained as yet, and does not appertain to its peculiar

character as an antizymotic. A boy in my factory broke a bottle of compound spirits of ether, saturating the front of his pantaloons; this then took fire from a lamp which he was using, and he was quite severely burned over the lower part of his abdomen, the genitals and upper part of the thighs. In my absence he was taken to his home and dressed with cotton and oil. In a few hours I obtained permission of his medical attendant to apply the carbolic acid, which was attended with speedy relief of his pain, and he had a quick recovery.

Sulphate of Anilin has been given with great success in spasmodic affections, to children and adults. A lady of this city who was taken with convulsions four weeks previous to her confinement. The convulsions increased gradually from one a day to three or four daily. At last the sulphate of anilin was given in three grain doses every three hours. In thirty-six hours she was cured, and eight days after that delivered of a healthy child. The sulphate of anilin is a white powder, easily taken, and was procured of Mr. J. Rudolphy, wholesale druggist, 536 Pearl street, New York. Of the same house a fine article of bromoform can be obtained.

Zymosis.—A new Antiseptic Salt.—Dr. Sansom exhibited to the medical society of London, specimens of compound salts, the sulpho carbolates, which are to be given internally. They are composed of the sulphites and carbolic acid, which combine the chemical and vital qualities of the former and the powerful effects of the latter on organized materials.—*Med. Times and Gazette*.

Premature Decay of Teeth.—A London surgeon has discovered the cause of the premature decay of the permanent teeth. It is for the want of a stimulus of pressure on the socket, owing to the universal practice of rendering the food soft by cooking. His remedy is the common use of navy biscuit, or "hard tack," instead of bread.

Carbolate of Quinia.—With bases, even weak ones, such as quinia, carbolic acid loses, in a great degree, its irritating properties. G. Braun has given it with benefit in puerperal diseases, and Duehek in several typhus cases and in one of pyemia. Pills containing one grain of quinia with one-sixth of a grain of carbolic acid, were given repeatedly without the slightest inconvenience. And from three to six grains of carbolic acid were given daily without injury.—*Jahrbucher der Ges. Med.*

Pharmacy.—On this subject we take pleasure in reporting the reception of a good supply, by Messrs. Allen & Co., of this city, of those excellent preparations of Dr. E. R. Squibbs, of Brooklyn, N. Y., consisting in part of fluid extracts, made without heat. Also, Liquor Chloropercha, Chloroformum Purificatum, and many other articles too numerous to mention. The Liquor Chloropercha is now preferred by surgeons to Colodion, on account that it produces a more flexible and tougher film, and does not contract in drying. The purified chloroform is that which only should be used internally, and none other should ever be either inhaled or swallowed. It is deprived of all impurities that is either hurtful or dangerous.

Now, let the members of the Academy give these preparations a fair trial, and see that their prescriptions are honestly put up with them by the retailers, and they will soon be convinced by the prompt effect they will see produced by them, over the trash they have heretofore been getting. The superiority of these preparations are so well known in the East, that the prominent men of the profession there prefer them to all others ; and even in the interior of the State of New York, many practitioners are found who will use none other in their practice.

The system of manufacturing the so-called "*cheap medicines*," ought not to be tolerated in any civilized country. It is a species of indirect swindling against which the public have no means to protect themselves. And to protect the people either the pharmacopœia ought to be made the book of law regulating such matters, or else every manufacturer should be compelled to state the strength and quality of each article made by him on the label ; and if found wanting in this, severe punishment ought to follow.

Very carefully conducted experiments, lately made by W. M. Smith, M. D., and reported to the New York State Medical Society, to ascertain the active principle and actual value of fluid extract of conium, of different makers, resulted as follows : Squibbs' 42, Tilden's 5, and Thayer's 10.

REMARKS.

Dr. Thacker thought it would be a very appropriate thing for the Board of Health to appoint an Inspector of Drugs ; some

such appointment was rendered necessary by the adulteration and poor quality of the medicines used by apothecaries in filling prescriptions.

Dr. Murphy emphatically endorsed the views of Dr. Unzicker. He thought the Doctor deserved a great deal of credit for the manner in which he prepared his reports; it being evident that he took especial trouble to thoroughly investigate this question of the impurity of medicines. Any physician could readily satisfy himself of the truth of what had been stated in the paper by examining the solid extracts with which apothecaries generally, throughout the city, filled their prescription cases. They would find that these extracts could not be distinguished by any of their physical qualities, instancing, *hyoscyamus*, *conium* and *belladonna*, all of which would be found identical in color and odor, and as far as they were concerned therapeutically, wholly worthless. The fluid extracts were, as a rule, nothing but trash. Even the so-often used Comp. Ext. Colocynth, would be found of no use whatever. The speaker went on to give extended examples from his own practice, showing the uncertainty in which the physician is involved and the consequent detriment to patients which must ensue. He was glad a movement in the right direction was being made, for much effort had been wasted in the early years of the Academy in endeavors to compel druggists to conform, in their business outside of the prescription desk, to the demands of the Academy—effort, which, if it had been directed to the securing of a standard purity for drugs, would have accomplished much good. There were not now in the city more than two or three places where a physician could expect to have his prescriptions properly filled; such was the startling magnitude of the evil.

There could be no doubt that Dr. Squibbs' preparations were the best. The action of the Tilden Brothers before the American Medical Association, at Washington, had not given him a very flattering impression of their reliability, and the opinion then formed had been confirmed by the reading of this evening's report; and he begged to be understood on this question, that he was not advertising any one specially, but if the report of the New York Committee, on the comparative purity of these two firms' drugs was true, and he saw no reason to doubt it, the superiority of the one over the other could not be too widely published. The druggists had no claims on the physicians, for they

had always abused confidence, by prescribing, by using the prescriptions of prominent physicians, and by refilling prescriptions, without authority from the attending physician. The New York Court had decided but a few days before that the prescription belonged neither to the patient nor to the druggist, but was the property of the Doctor prescribing.

Dr. Unzicker said that when he was East last year, for his own gratification, as well as for other reasons, he had thoroughly investigated the subject, visiting most of the wholesale establishments, and conversing with their proprietors. He found that the vast majority of the preparations were not one-half the strength given in the United States Pharmacopœia, the purest (Dr. Squibbs') containing about 40 per cent. Generally, two varieties were furnished for the market, varying in price with the strength of the article. To illustrate: He was offered two preparations, priced respectively six and twelve dollars per pound, of the compound extract of Colocynth; pulverized Scammony was worth twenty-four dollars per pound, and it was impossible to make a good extract under twelve dollars per pound. In nearly all cases he would find that the powders sold at much less than the crude article itself. Mr. Tilden acknowledged to him the impurity of his drugs, but stated that the low-priced articles were the only ones that would command the market, and that when he got orders the chief inquiry was as to the price of the article—cheapness being the desideratum. This firm, however, held itself in readiness to fill special orders for compounds of the full strength of the Pharmacopœia. The country was flooded with these worthless imitations, which druggists used to fill prescriptions calling for compounds of the full strength; and the thing was getting worse every day. He had also frequently visited the wholesale dealers in this city, and he had been told the same thing, there was absolutely no demand for the higher grades of medicines; it did not pay to keep them on hand. He saw no remedy but to have the Pharmacopœia made a book of law.

After some further reiteration of his former remarks, by Dr. Thacker, the report was unanimously adopted.

Dr. Thacker then moved, Dr. Unzicker be appointed a Committee of One to confer with the Cincinnati Board of Health, upon the propriety of appointing an Inspector of Drugs. Passed.

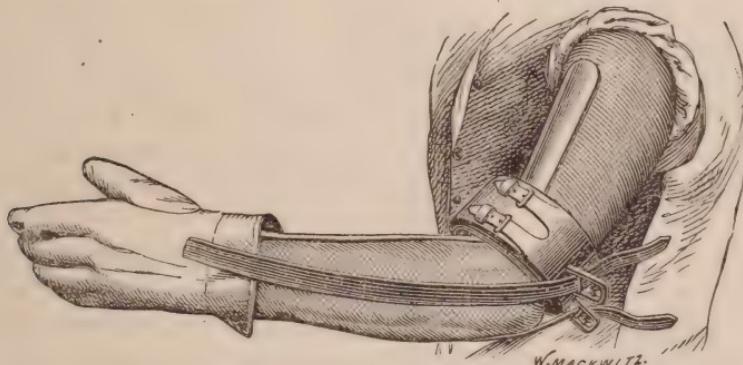
Special Selection.

Method of Treating Fractures of the Olecranon Process, and Head of the Humerus.

BY E. A. CLARK, M. D., Resident Physician St. Louis City Hospital.

FRACTURES OF THE OLECRANON.

I have found all the ordinary appliances in use for treating fractures of the olecranon so deficient in meeting the indications required, that I have been induced to devise the apparatus represented in the following wood-cut, which is sufficiently simple to require but little description.



Fractures of the olecranon, as they usually occur toward the middle or base of the process, are generally attended with such a degree of displacement—especially in muscular subjects—that the ordinary method of applying narrow strips of cotton or cloth around the arm—both above and below the elbow—and approximating them by means of lateral strips, as recommended by Sir Astley Cooper and Amesbury, with the view of drawing down the upper fragment in apposition with the head of the ulna, and thus securing the condition most favorable for bony union, will necessarily require these bands to be so tight around the arm, at both points, as to arrest the circulation. This danger will be the more imminent in cases where there is much contusion and swelling of the soft parts, which, as might be expected, from the very nature of the violence or force required to produce this fracture, is almost always the case. The method of treatment recommended by these gentlemen is also objectionable, in that they direct that the arm be kept in the straight position.

The foregoing apparatus consists of a band of ordinary sole leather about two inches in width, and of sufficient length to surround the arm, lined with cloth or chamois, and well padded with cotton or hair. In order to give the band additional firmness, and also to secure it around the arm, a strip of common harness-leather is stitched upon the outside, to one end of which two small buckles are attached, while the other end, which extends about three inches beyond the band, is split or cut into two straps to correspond with, and fasten into the buckles. The band is fastened around the arm above the fractured process, and may be drawn to any degree of tightness necessary to bring the broken fragment down when traction is made upon it.

The same band may be used on either arm, and may be adapted to an arm of any size. On the outer side of this band, and one inch apart—one on each side of the olecranon—are two buckles or staples, which should be two inches in length, and three-fourths of an inch in width, and clinched on the inside of the leather band, from which they project at a right angle. These buckles or staples also have three bars across them, with two tongues made to turn either way.

In applying this apparatus the arm should be fixed at an angle of forty-five degrees, and a common pasteboard splint bent at that angle placed upon its anterior surface. The leather band is then buckled over this splint just above the fragment of the olecranon, and the entire fore-arm is covered with a bandage to hold the anterior splint firm to the arm, and thus prevent any movement of the elbow-joint, which, if allowed, would be constantly modifying the force exerted upon the fracture. A common buckskin glove is then placed upon the hand, to the anterior and posterior surfaces of which are attached two leather straps, which are to be buckled into the staples on the band. By buckling these straps over the bars at a greater or less distance from the band, and tightening them as required, we obtain the necessary amount of leverage to turn the lower edge of the band in upon the arm, and push the fractured process down before it.

By making traction upon these straps any degree of force may be exerted upon the band, necessary to draw the broken fragment down and hold it in perfect apposition with the head of the ulna.

It may be objected to this method of treatment, that the arm is held in a flexed position, thus increasing the space between

the two fragments. But the advantage of this position is apparent for two reasons:

First, by flexing the arm to this extent the point of the olecranon is made more prominent, and, consequently, the band more surely adjusted so as not to slip over it; while, again, the force exerted upon the band by the straps, directed at an angle of forty-five degrees from the axis of the humerus, renders the pressure still more secure above the point of the olecranon, and prevents the possibility of it slipping back beneath the band.

The second reason for fixing the arm in this position is to relax the brachialis anticus muscle, the action of which, in cases where the fracture occurs low down, near the base of the olecranon, and especially in a muscular subject, when the arm is held in a perfectly straight position, evidently draws the head of the ulna forward, so that a portion of its fractured surface is in direct apposition with the articular surface of the lower end of the humerus; while if the detached fragment of the olecranon be forced down to its proper position it would not be in complete apposition with the upper end of the ulna, but would leave a triangular space in the articulation to be filled up by callous, and thus produce more or less complete ankylosis of the joint.

This apparatus when applied as described, is in no way painful to the patient, the band being padded in the inside, and the pressure exerted by it on the anterior surface of the arm bearing upon the pasteboard splint; the only other pressure exercised is directly upon the olecranon, and that upon such a broad surface that sloughing need not occur in any case.

I have treated but one case with this apparatus, and with the following result:

A laboring man, aged 32 years, was admitted to hospital five days after receiving a fracture of the olecranon near its base. At the time of his admission he had an abscess as large as a hen's egg immediately over the point of the olecranon, resulting from a contusion received when the bone was fractured. The abscess was opened before the dressing was applied, and, notwithstanding, all the pressure required to hold the bones in apposition was made upon the point over the abscess, it healed quite readily, and in seven weeks the apparatus was removed, leaving firm bony union in the fracture, without the least deformity or displacement; and now—three weeks since—the patient has recovered almost perfect use of his arm.

No passive motion of the joint was allowed at any period of the treatment.

FRACTURES OF THE HEAD OF THE HUMERUS.

Every surgeon who has had much experience in treating fractures about the head of the humerus, can testify to the great difficulty of maintaining the fragments in apposition, even with the most ingenious appliances, among which those of Desault, Sir A. Cooper, Fergusson, Erichsen, Welch, Richerard and Dupuytren are most generally used. The very fact that the means of treating these fractures have been changed and modified by so many distinguished surgeons, is sufficient evidence of the difficulties to be encountered in adapting any apparatus to correct the deformity most usually found to exist in these injuries.

In speaking of fractures of the head of the humerus, I refer only to that portion of the bone above the attachment of the latissimus dorsi and pectoralis major muscles. This would embrace—external to the capsular ligament—the tubercles and surgical neck, in the latter of which fractures most frequently occur from direct violence; yet fractures not unfrequently occur through the tubercles from the same cause, and in both cases there is always more or less displacement, where the fracture is complete and not impacted. Fractures of the anatomical neck are not so often attended with displacement or shortening, but even here it is not uncommon from the great violence required to produce the fracture, to find the capsular ligament ruptured, and one or both fragments displaced. In all cases of fracture occurring outside of the capsule where there is no impaction, there must be more or less displacement of the upper fragment, from the contraction of the muscles attached about the tubercles. It is on this account that none of the appliances in ordinary use, such as pads in the axilla, and cap splints over the point of the shoulder, can be made effectual in maintaining the bones in apposition; because it is impossible to place any kind of compress in the axilla, that can be brought to bear upon the upper fragment, without producing an amount of pressure on the axillary vessels intolerable to the patient; while it would be a rare and peculiar fracture that could be kept in apposition, where the upper fragment and muscles attached to it were allowed to go unrestrained, even though the shaft of the humerus might be maintained in its proper axis by the use of a pad in the axilla.

Where there is shortening of the limb, as is almost invariably the case in fractures at the surgical neck, none of these appliances could have the least influence in correcting such deformity, further than that the pressure from the bandages might control the contraction of the muscles.

In fracture of the anatomical neck with laceration of the capsular ligament attended with displacement, the pad in the axilla would be likely to increase the deformity, and it certainly could in no wise correct it.

The accompanying wood-cut represents a method I have employed which is not open to the above objections. The appliance consists merely of two strips of adhesive plaster about three inches in width, applied to the internal and external surface of the arm as high as the upper part of the middle third of

the humerus. These strips are bound to the arm by a roller bandage, and at the lower end, beneath the point of the elbow, are attached to a cord, to which a sand-bag is attached, weighing ordinarily from three to four pounds.

This sand-bag, as represented in the diagram, is attached close to the point of the elbow when the patient wishes to walk about, by knotting the cord by which it is suspended; and when he lies in bed, the knot in the cord, as seen in the cut, is loosed, and the cord carried beneath the bed clothing over a small pulley placed at the foot of the bed, and in this way an equal extension is constantly kept up, whether the patient be confined to his bed, or is able and prefers to walk about.

When using this apparatus for treating these fractures, I apply no other dressing, and entirely ignore the compress in the axilla as useless, if not positively injurious. The constant traction upon the muscles soon exhausts their tonicity, so that they allow the bones to fall into their natural position, while the extension being constantly in the line of the axis of the humerus, it is quite im-



possible that any displacement should continue, either laterally or of an angular character, or that any shortening should result.

I have, as yet, treated but one case of fracture of the surgical neck of the humerus by this method.

The patient was a stout muscular man, aged 33 years, who had fallen some twelve feet, striking the point of the shoulder upon the ground, causing considerable contusion of the soft parts besides the fracture, which was considerably displaced by the lower fragment projecting outward; there was also shortening to the extent of three-fourths of an inch. The patient complained of constant and severe pain at the point of fracture until the third day, when the above apparatus was applied, with the effect of relieving the pains almost instantly. At the end of seven weeks the dressing was removed, and the union in the fracture found to be firm, without any displacement or shortening, and in ten days after, the patient was discharged from the hospital with perfect use of his arm.

Correspondence.

Reply of Wm. B. Davis to Prof. B. F. Richardson.

EDITORS LANCET AND OBSERVER: At the session of the Cincinnati Academy of Medicine, held April 6th, 1868, Dr. B. F. Richardson took the floor, and addressed the Academy on the subject of Diphtheria. In the language of the *Medical Repertory*, (July issue,) "Dr. R.'s remarks, on that occasion, were largely embodied in his remarks made in March," in the Academy. The only new points worthy of notice, were the two which I undertook to respond to at the meeting on April 13th. The Dr. consumed the entire session of 6th inst. As an honest disputant he was bound to give an opportunity for a reply. No reply could be made before the next session; at that meeting, on the 13th inst., I responded to him.

The Academy remained in session during the succeeding months of May and June. At any of its meetings in said months, the opportunity and "occasion for an oral reply" was given the Doctor. He, however, preferred the printed columns of the

Lancet and Observer, (August issue,) to the arena wherein his alleged provocation had been given, for his reply.

He is impelled to this because "I (Dr. Richardson) have been and still am before the profession as a *teacher*,"

The Professor, in his communication to the *Lancet*, (August issue.) says, "I wish to direct especial attention to the first nine lines of Dr. Davis' opening paragraph. Nothing that I have said, nothing that I am reported in the minutes as having said, afford the least foundation for these bold assertions." The said nine lines read as follows:

"Dr. Wm. B. Davis regretted that Dr. Richardson was not present. He had said on a former evening, that the authorities were unanimous in the opinion that Diphtheria would not occur twice in the same individual, and he had even gone so far as to challenge the production of any authority that stated it did recur. In support of the statement of the non-recurrence of Diphtheria in the same person no authority has been quoted, although he had merely mentioned the names of Flint, Condie and West, but at the same time had not given us their language."—*Published Proceedings of Academy, Lancet and Observer, July issue, page 390.*

I think the Professor did use the language imputed to him in the above "nine lines," I shall not, however, contend with him as to their exact phraseology; but that he did say *all* these "nine lines" express, viz., an emphatic and unequivocal declaration that Diphtheria exhausted the susceptibility of the system to it by one attack, and that it could not recur in the same individual. I do affirm, and, in support of said affirmation, I call the attention of the reader to an "*official*" transcript of the Records of the Academy of Medicine, pages 347-348:

* * * * * "the same gentleman calls Diphtheria a specific zymotic disease, and as all that class of diseases exhaust the susceptibility of the system by one attack; if the disease is specific it can not recur, and if it does recur it can not be called Diphtheria. The recurrence of specific diseases might happen, but so uncommonly, that he could safely challenge any gentleman in the Academy to produce a case of the third appearance of Scarlatina, either in his own practice, or personally observed in the practice of any other one. And he would say in regard to Dr. Flint's last work, that, after his able description and idea of Diphtheria, it must certainly be a typographical error which

makes him say, in drawing the differential diagnosis between Scarlatina and Diphtheria, that while the former disease occurs but once, Diphtheria may recur frequently. Analogically this could not be true, and positively, in his own observation, it was not true; and it was some consolation to know that we can tell parents, that when a child has once passed through this fearful disease, there will be no return."

[A correct extract from the records of the Academy of Medicine.

JOHN L. NEILSON, *Secretary.]*

We will now pass to the second point in the Professor's "communication," namely, "His (Dr. D's.) facetious remarks upon my allusion to Bretonneau, in which he attributes to me the innocent delusion of supposing the said writer to be 'one of the ancient authorities,' one of the 'Fathers of Medicine,' is quite refreshing, and must have been a severe strain upon his modesty. 'Tis a pity the record Squelches it."

[*"Webster"* says *Squelch* is a refined word used only by professors.]

Subjoined is the "Record" for the readers benefit. [Official Records, pages 345-346]. "It had been said in the Academy that Diphtheria was epidemic sore throat, with or without exudation; but he (Prof. Richardson) did not see how, at this day, such an opinion could be held, and to go back to the time of Bretonneau for a classification of throat affections, was not at all necessary or wise. Medical men were to-day, to say the least, just as competent to judge of disease, as the so-called 'Fathers of Medicine,' for when the endeavor now is to sharply draw the lines of distinction between diseases, if we go back, we only see the utter want of clearness and definiteness of description."

[A correct extract from the records of the Academy of Medicine.

JOHN L. NEILSON, *Secretary.]*

The above extract "is quite refreshing," and while the Professor is enjoying its "facetiousness," the reader will determine who is "Squelched." In this connection it will be proper to read the commentary of the Secretary of the Academy of Medicine, on another clause of the professor's "communication." The reader will agree with me in thinking it also "very refreshing" and quite "facetious."

ACADEMY OF MEDICINE, September 7th, 1868.—"Upon a ques-

tion of privilege the Secretary retained the floor after the reading of the minutes. He desired to correct a statement made by Dr. Richardson in a 'communication' published in the August number of the *Cincinnati Lancet and Observer*, a copy of which he held in his hand. He then read as follows:

'There are those who cram themselves for special occasions. There are others who review and so alter and amend their remarks for publication, as to be no longer recognized as their utterances upon the floor of the Academy. I make this statement of fact simply that your readers may learn that which they were entitled to know long ago, viz: that in this way some members of the Academy are made to appear to much better advantage than do others, in the published proceedings of that institution.'

"He would say that the statements made in this paragraph were incorrect in every particular, in so far as they concerned the management of the records since he had held the office of Secretary to the Academy. They reflected both upon himself and the Academy; in fact they were so evidently untrue, that it seemed scarcely necessary that attention should be called to their unfairness. He had never allowed members to 'alter, review or amend their remarks;' he had never known a member to desire so to do. He could not tell by what authority these sweeping statements had been made, but if their application was directed particularly to the gentleman, against whom the whole communication was made, he would say that the gentleman never had seen the manuscript prepared by the Secretary for the printer, which manuscript would be found to be an exact copy of the records."

JOHN L. NEILSON, *Secretary.*

A gentleman who has been, and still "is before the profession as a teacher;" whose virtuous indignation led him to write a "communication" to the *Lancet*, in order that its readers might learn "that which they were entitled to know long ago," could not himself be guilty of "altering and amending" his utterances.

On page 483 of the *Lancet and Observer* the professor says, "That your readers may judge upon what grounds, if any, Dr. Wm. B. Davis has presumed to put in my mouth certain assertions. I desire that you publish the accompanying transcript of the previous proceedings of the Academy," and the "transcript" is published in connection with his "communication."

That your readers may learn that which they are entitled to know, I propose to compare portions of Prof. Richardson's

"transcript of the proceedings of the Academy," with a transcript authenticated by the Secretary of said Academy.

Prof. Richardson's Transcript, page 486 Lancet and Observer:

* * * "the same gentleman calls Diphtheria a specific zymotic disease, when all that class of disease exhaust the susceptibility of the system by one attack, and Diphtheria is no more liable to recur, than is Scarlatina, Measles, Typhoid Fever, Idiopathic Erysipelas, or any other specific essential form of disease. The recurrence of specific diseases might happen, but so uncommonly, that he could safely challenge any gentleman in the Academy to produce a case of the third appearance of Scarlatina."

Page 485 Lancet and Observer:

"It had been said in the Academy that Diphtheria was epidemic sore throat, with or without exudation; but he did not see how, at this day, such an opinion could be held, and to go **forty years back*, to the time of Bretonneau's writing, for a description of Diphtheria, was not at all necessary or wise. Medical men were to-day, to say the least, just as competent to judge of disease as the older writers; for when the endeavor now is to sharply draw the line of distinction between diseases, if we go back, we only see the utter want of clearness and definiteness of description."

* Bretonneau died in 1859. The only English translation of his writings was first published in '59, "*forty years back!*"

W. B. D.

Secretary's Transcript, page 347 Records of Academy:

* * * "the same gentleman calls Diphtheria a specific zymotic disease, and as all that class of diseases exhaust the susceptibility of the system by one attack, if the disease is specific it can not recur, and if it does recur, it can not be called Diphtheria. The recurrence of specific diseases might happen, but so uncommonly, that he could safely challenge any gentleman in the Academy to produce a case of the third appearance of Scarlatina."

[A correct extract from the Records of the Academy of Medicine.

JOHN L. NEILSON, Sec'y.]

Page 345-346 Records of Academy:

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[A correct extract from the Records of the Academy of Medicine.

JOHN L. NEILSON, Sec'y.]

Prof. Richardson, like some other Professors, is so accustomed to having "every thing his own way" in the lecture-room, that when in the Academy, he sometimes forgets that he is addressing his Peers.

The afore-mentioned fact will also account for his impatience under criticism.

In my reference to his speech, I indulged in no personal reflections, and said nothing which was not admissible and legitimate in a discussion among gentlemen.

I feel assured that the "transcript" of his speech, which accompanies his "communication," was not intended to be considered a transcript of the official proceedings of the Academy, but the Professor's *recollection* of what he said, or intended to say, on the occasion alluded to. No one who knows him would for a moment think him capable of falsifying the records, in order to "Squelch" an adversary.

An apology is due the Professor for my tardy reply. I was absent from home during the month of August, and did not see his "communication" until the 5th of September.

LETTER FROM LONDON.

LONDON, August 20, 1868.

EDITOR LANCET AND OBSERVER: Since my last letter I have had the pleasure of attending the meeting of the British Medical Association, which came off at Oxford, on the 4th, 5th, 6th and 7th instant, and a brief account of which may not be without interest. I call it a pleasure to have been there, as it afforded me an opportunity of seeing many of the celebrities of the profession of Great Britain, whose names are as household words in far off America, and whose teachings are, in a great measure, felt the wide world over.

Perhaps no place could have been chosen, more appropriate for the meeting of a scientific or learned body, than this highly interesting old town, for many centuries the great center of learning in England. The meeting was quite a large one, there having been between five hundred and fifty and six hundred members in attendance. The Association numbers between three and

four thousand members, and is rapidly increasing. Professor Gross and Dr. Goodman, of Philadelphia, Dr. Jones, of Chicago, and Dr. Lindsley, of Nashville, I had the pleasure of meeting there. Besides them, there were also present Drs. Barker, Winston and Thiebeau, of New York, and Dr. Ellis, of Boston. The University honored the profession on this occasion by conferring the degree of D. C. L. on Sir Charles Locock, Bart., M. D., Rev. Prof. Haughton, M. D., of Dublin, W. W. Gull, M. D., Mr. Paget, Mr. Syme and Mr. Simon. The ceremony was witnessed by a very large audience, many besides the members of the Association having been present; and being conducted in Latin, and in so venerable a place, it had a very dignified and solemn appearance. I did not reach Oxford in time to hear either the valedictory of Dr. Stokes, or the inaugural of the President, Dr. Ackland. I was fortunate enough, however, to hear the masterly address of Dr. Gull, of London, which in itself was a rare treat. I may mention, *en passant*, that Dr. Gull does the leading consultation practice of London at present, which yields him, it is estimated, an income of twelve thousand pounds a year, or in our currency, say eighty-five thousand dollars. A few years back, when he resigned the place as one of the physicians to Guy's Hospital, he gave as a reason that the time his duties there took amounted to a loss to him of five thousand a year.

The very excellent addresses of Professors Rolleston and Haughton should also be mentioned.

Dr. Hughes Bennett, always "ahead of the hounds," read a report of a series of very elaborate experiments performed on dogs, the gist of which was that *mercury is not a cholagogue!* Although he defended it with great ability (and plausibility), I think he succeeded in convincing very few of the correctness of his conclusions.

My visit to Oxford forced one conclusion on my mind, which is, that we, in America, must work harder than we do before we can claim for our National Association equal excellence with that of Great Britain. For instance, at this meeting there were some seventy-five or eighty papers read on different subjects, some of them very elaborate essays, and half that number, perhaps, had to lie over for want of time.

Besides many of the most eminent men of the profession in the three kingdoms, there was a fair sprinkling from abroad. Of these latter I may mention Dr. Duchene de Boulogne, Marey,

the inventor of the sphygmograph, Marion Sims, now of Paris, and Gimbert of Cannes, besides those from our own country I have already mentioned.

The papers I mentioned above, I should have said, were read in the sections into which the Association is divided, namely, on Medicine, Physiology, Surgery, Midwifery and Public Medicine; presided over respectively by Dr. Stokes, in the absence of Sir William Jenner, Professor Rolleston, Mr. Paget, Sir Charles Locock and Mr. John Simon. The section of Public Medicine embraces within its scope such matters as professional ethics, the various relations of the profession and community, sanitary subjects, and, in short, every thing not coming under either of the other headings.

It was very pleasing to observe the deference with which Professor Gross was listened to whenever he spoke. At the dinner, when the visitors from abroad were toasted, it was he who responded. He astonished all hearers, however, when he made the statement in the surgical section that *very rarely* in all his practice had he had occasion to use the knife in cases of strangulated hernia, having been nearly always able to effect reduction by the taxis, and this without reference to time or other circumstances.

Since I have been in London I have not allowed sight-seeing in general to prevent my visiting the hospitals. Indeed I have seen nearly all of them. Saint Bartholomew's, as you are aware, is the largest in the metropolis, containing, as it does, six hundred and fifty-beds. Besides, it has an average daily attendance of some two thousand five hundred out patients. Such an establishment certainly affords a grand field for the study of disease. Guy's, however, though at present of less capacity, will, when the new addition is completed, be larger than it. The kitchen and drug departments at St. Bartholomew's are well worth seeing. In the former, and in many other kitchens here, the gas ovens are used exclusively. The drug department is on a very extensive scale, being supplied with steam power for grinding, etc., and steam-heated apparatus for evaporating, making decoctions, etc. The museum is a very fine one, and affords ample opportunities for the study of anatomy, physiology, pathology, etc. Here I saw what looked like old friends, the specimens from which were copied many of the illustrations of Mr. Stanley's and Mr. Paget's works.

The special feature of the museum of Guy's is the series of wax models, the finest in the world, illustrative of anatomy and pathology. These are truly artistic. They are made by a modeler kept by that hospital for the purpose exclusively. I must acknowledge I have been accustomed to regard wax models with contempt, but a visit to Guy's has given me new light on the subject.

Fine though these museums I have mentioned are, yet they sink into comparative insignificance when compared with that of the Royal College of Surgeons. This is in Lincoln's-inn Fields, cost two hundred and fifty thousand pounds (or about a million and three-quarters of our money), and contains over forty thousand specimens.

The present is a very unfavorable time for seeing the London hospitals, as there are very few operations being performed except those of an urgent character, and most of the prominent men of the profession are absent on their summer vacation. I have, however, seen Sir William Ferguson and Mr. Henry Smith operate at King's College Hospital, Mr. Bryant and Mr. Durham at Guy's, Mr. Sidney Jones at St. Thomas', Mr. Christopher Heath at University College, and Mr. Critchett and Mr. Lawson at the Royal Ophthalmic Hospital.

The carbolic acid is undergoing trial in some of the hospitals here now, as Guy's and University College. When first tried, a year ago, it was regarded as a failure, but Professor Lister, its great advocate, claiming it was not fairly tested, it is getting another trial.

Besides the hospitals proper, I have seen several of the insane asylums, as those of Edinburg and Glasgow, the Richmond Asylum, in Dublin, those at Limerick and Cork, and the splendid establishment at Colusy Hatch, eight or nine miles from London. This asylum contains two thousand and fifty patients, and is kept in very fine style. The kitchen and bake house particularly are models of neatness, and in every way ahead of anything of the I have seen anywhere. Here, also, a great deal of the cooking is done by gas apparatus. One marked feature in the management of the insane in this country is that they are kept out of doors a great deal, so that if they get nothing else good, they have a full allowance of fresh air. This I consider decidedly better than caging them up in any wards, even though they be favored with the boasted "downward and outward" ventilation.

Judging from my own observations, I would say that American asylums, as a general rule, compare very favorably with those of Great Britain, being in some particulars far superior to them, though I must add, the one with which I was most familiar was a sad exception to the rule.

At the Royal Edinburg Asylum I met Dr. Skae, who has made quite a reputation in this specialty. It is my intention to visit Dr. Forbes Winslow's Asylum and others, and in another letter I may give you some facts in connection with them.

T. H. K.

LETTER FROM BOSTON.

BOSTON, MASS., September 9th, 1868.

EDITOR LANCET AND OBSERVER: A costly and beautiful fountain monument has been erected in our Public Garden, by the late Mr. Thomas Lee, to commemorate the discovery of the anaesthetic properties of Ether, and the first public use of it in this city.

Some weeks ago this monument was dedicated and surrendered into the custody of the city authorities. Dr. Henry J. Bigelow made the presentation address, and His Honor Mayor Shurtleff, who is a physician, replied as the municipal representative.

What follows I quote from the report in the *Boston Daily Advertiser*:

Mr. Mayor.—It was the wish of the late venerable gentleman, who caused this monument to be erected, to rear an enduring memorial of the discovery in Boston, from which dates the era of painless surgery; and also that on some fitting occasion it should be offered for the acceptance of his fellow citizens.

In no act of a long life, characterized by many deeds of liberality, by the exercise of a refined and cultivated taste of nature and for art, and by a discriminating judgment of men and of passing events, did he show greater discernment, than when he organized this work; and although he did not live to see it executed, he had so far supervised its plans, and so intrusted them to skillful hands, that no difficulty was met in completing its beautiful design in detailed conformity to his wishes.

This monument is intended, in the words of the tablet, which were written since his death, "To commemorate the discovery

that the inhaling of ether causes insensibility of pain; first proved to the world at the Massachusetts General Hospital, in Boston, October, A. D. 1846," by its appliance during a protracted dissection, which, when followed by one of the severest operations known to surgery, was a final and conclusive test in a close and connected series of successful experiments, which proved that pain could be annulled: first, with certainty, no matter who the individual; secondly, with completeness, no matter how great might be its degree; and thirdly, with safety. These three points were all absolutely involved in the discovery, and these alone. Before the consecutive experiments which culminated in those here recorded, neither of these points had been established by conclusive proof. The world was ignorant of the great truths they asserted, the discovery had not been made.

The philanthropist had indeed yearned to relieve suffering humanity; the poet had prophetically announced a world freed from physical pain; the philosopher had made fruitless efforts to unveil the hidden secret. Instances of accidental insensibility had been observed. Here and there an ingenious man had devised and tried some single experiment with greater or less success, and then abandoned the pursuit; or tantalized by a possibility at one moment in his grasp, and in the next eluding it, stimulated by a flattering promise of achieving something at once practical and useful, had followed up his experiments hopefully, until some great public failure disheartened him, made his proselytes incredulous, and left the world still to suffer pain.

Men had been made insensible to pain through mental excitement, or by the agency of mesmerism or hypnotism, by the dead drunkenness of alcohol, the narcotism of opium, the inhalation of nitrous oxide and other gases, and even by the vapor of ether. For years all this had been known to be possible, but it attracted little attention. These previous experiments instituted by different persons were inconclusive, because they led to no constant result; the anaesthesia could not be relied on, or it was not demonstrated that it could be relied on, either sure to occur, or as proof against the severe forms of pain. The question of danger from this extraordinary trance, was also unsettled. No consulting board of surgeons would have dared to sanction the production of prolonged unconsciousness during an operation, before the series of consecutive experiments were made here in Tremont street, and at the hospital. There had been a lack of persever-

ance or of good fortune in the experimenters, or an imperfection in their materials or method, and the future discovery which was soon to burst upon the world, halted for an interval of years at this imperfect stage. The whole progress of all invention and discovery has been a monotonous catalogue of such imperfect efforts and such failures. But when these consecutive experiments had been made in Boston, the discovery had been made; and in grateful and unhesitating recognition of it, the entire civilized world simultaneously rose up to hail it with acclamatory welcome.

Thus was made the discovery, and thus was begun the career of anæsthetic inhalation. Modifications, imitations and substitutes, have sprung up in all civilized countries. New processes and new materials will yet be furnished by science, or demanded by convenience or economy; but after more than twenty years of its successful trial, nothing has been found to surpass, in its efficiency or unqualified safety, the original ether then used.

To commemorate the triple and demonstrated discovery, not of a probable, an uncertain or untrustworthy, but of an inevitable, complete and safe anæsthesia, this monument has been erected in a city which was the humble instrument of Divine Providence in diffusing to the nations this incalculable blessing.

I well remember when the eloquent and gifted man, whose brazen effigy on yonder pedestal so powerfully recalls his living presence, in an address delivered at the Medical College on the 4th of November, 1846, said, with an unconscious foreshadowing of what was soon to happen. "I can not suppress the remark that the great principle of analogy seems to authorize the hope that * * * further discoveries may be expected scarcely less brilliant than that of vaccination." How far even this prophetic inspiration fell short of the reality! How little did he dream that the lapse of a few brief days would herald to the earth the greatest boon ever accorded to the physical welfare of mankind; days of discovery* that forever silenced the dreadful shriek of agony which many of us can yet recall in the surgical amphitheatre of the institution whose name is now immortalized, that stilled the moan of the soldier stricken down upon the battle-field, assuaged the pangs of disease, softened the approach of death, and lent a sweet obliviousness in what was once its hour of anguish to all animal existence, from the poor suffering brute up to humanity, to man born of woman, and to woman of whom man was born.

In the name and at the request of my venerable friend, the late Mr. Thomas Lee, of his executors, and of the gentlemen to whom he intrusted the arrangement of this ceremony, I beg to offer this memorial to you, sir, and through you to the city of Boston.

The remarks of Dr. Bigelow elicited considerable applause. Mayor Shurtleff responded as follows:

In behalf of the municipal authorities of Boston, I now formally receive from you the gift of Mr. Thomas Lee; and promise that it shall be watched with care and protected from injury. And may this elegant structure long remain unimpaired by time, a memorial of the greatest boon ever vouchsafed to suffering humanity, and a monument of the gratitude of one of Boston's most worthy citizens.

The exercises were closed with an appropriate prayer by Rev. Dr. Lothrop, and after lingering about the monument for a while to admire its beauty and fine proportions, the audience dispersed.

We append a description of the monument, copied from the "History of the Water Works," by Nathaniel J. Bradlee, Esq., President of the Cochituate Water Board:

The form of the monument is suggested by mediæval types, modified by the nature of the white Concord granite used in its construction. It is about thirty feet in height, and arises from a square basin. Its base is cubical, leaving on each vertical face a niche containing a spouting lion's head, with sculptured water lilies and other aquatic plants. Upon this base or plinth, rests a surbase, adorned with mouldings from which arise a die, bearing upon each of its four sides an inscription, surmounted by a bas-relief in marble. These are sunk in the tympana of four pointed and cuspidated arches, supported each by two stunted shafts of red Gloucester granite, the capitals of which are enriched by poppies and oak leaves, this decoration being carried around the monument on the same level in a band or string course.

These arches form a canopy, square in plan, from which the structure diminishes by a series of mouldings to the base of a grouped quadripartite shaft of polished red granite. Its capital, which is decorated with oak leaves, bears on its abacus a group setting forth the story of "the good Samaritan," the type of the relief of suffering.

The inscriptions and bas-reliefs on the four sides are successively as follows:

I.

To commemorate
the discovery
that the inhalation of ether
causes insensibility to pain.
First proved to the world
at the Mass. General Hospital
in Boston,
October, A. D. MDCCCXLVI.

The bas-relief accompanying this represents a surgical operation in a civic hospital, the patient being under the influence of ether.

II.

Neither shall there be any more pain.
[Revelation.]

With an allegorical bas-relief of the Angel of Mercy descending to relieve suffering humanity.

III.

In gratitude
for the relief
of human suffering
by the inhaling of ether,
a citizen of Boston
has erected
this monument.

A. D. MDCCCLXVII.

With a bas-relief of a field hospital, with a wounded soldier in the hands of the surgeons.

IV.

This also cometh forth
from the Lord of Hosts,
which is wonderful
in council
and excellent
in working.

[Isaiah.]

The bas-relief accompanying this inscription is an allegory of the triumph of science.

B.

Removal of Foreign Body from the Female Bladder.

EDITOR LANCET AND OBSERVER: On the 28th day of June, 1868, I was called to see Mrs. ——, who was suffering from symptoms of chronic inflammation of the bladder, and was annoyed by the necessity of passing urine from ten to twenty times per day. On inquiring I learned she had been in this condition for the past twelve or fourteen years, but for the last ten months her suffering had been constantly increasing. She is a woman that

has the appearance of enjoying the best of health, is twenty-six years of age, is the mother of three children, two living.

Her husband told me they had doctored so much that they despaired of her obtaining any relief. I replied that from her healthy appearance she would undoubtedly get well, but before doing anything for her I should insist upon an examination of the parts, as I thought from the symptoms she had calculi in the bladder. Giving her consent, on the 29th of June, 1868, I made an examination with the sound, and, to my satisfaction, found a foreign body in the bladder, which I at once pronounced calculus, saying that the only relief she could obtain was by an operation. I concluded the calculus was not very large, and would try and remove it by dilating the urethra with a prepared sponge cut to the proper shape, wrapped with silk and saturated with mucilage of Gum Arabic. The dilator was introduced with some difficulty, and after cutting the silk I let it remain until the urethra was completely dilated, which took one and a half hour. After removing the sponge, used a pair of forceps which I had made some time ago to remove a vest button from a female bladder. (I send you a photograph of them. They are six inches long, and very delicate. The forceps will answer the purpose of removing all foreign substances from the female bladder, when they are not too large to pass through the urethra when sufficiently dilated.) I exposed them into the bladder and seized, as I supposed, the stone, and made gentle but firm traction. The parts gave way readily, and to my surprise I removed a *hair pin*, completely covered with calculous deposit, as shown by accompanying photograph. I was fortunate enough to seize the pin by the curved or breech part, where you will observe the deposit partially broken off by the forceps.

The patient does not remember when or how the pin got in the bladder, but it is supposed by the parents that it had been in there twelve or fourteen years, as she has been suffering that long with the gravel, as they termed it. The patient is now free from her former severe suffering, and is in the enjoyment of full health.

If you think this simple and plain statement of so remarkable a case is of sufficient importance to merit a place in your journal, please insert.

Respectfully,

VAN S. SELTZER, M. D.

COLUMBUS, OHIO, September, 5, 1868.

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

The American Ophthalmological Society.

This Association, which has only been in existence a few years, has already done much to advance and dignify one department of the healing art. Its adherents are to be found in most of the large cities of the Union, and their combined efforts are beginning to create a more healthy professional sentiment in regard to the practice of specialties; and to tell against the unblushing charlatanism that has so long found its richest harvests among diseases of the eye and the ear. While the avowed purpose of the Society, as declared in its constitution, is "the advancement of Ophthalmic Science and Art," yet it has been silently exerting an ethical influence on the profession, and developing an *esprit de corps*, without which our almost divine art would rapidly lapse to the level of a mere trade.

At the last meeting held at Newport, Rhode Island, in July, an addition was made to Art. III. of the Constitution, in regard to advertisements, which addition was interpreted to apply to cards, signs, etc. This article, as amended, reads as follows:

"The members shall be graduates in medicine, in good professional standing, who have an interest in Ophthalmic Science and Art. No member shall attach to his name, in any public manner, the title of 'oculist' or any similar title, or shall announce in print that he gives special or exclusive attention to special practice."

This amendment was adopted without a dissenting voice, and several of the members, myself included, who, up to that time, had used the simple sign of oculist, have now abolished it for the common title of Dr. or M. D.

In the last number of *The Medical Record* is an editorial, which so well embodies my views on the subject, that I give place to it entire.

"THE TITLE OF OCULIST.—We have already noticed in commendatory terms the recent action of the American Ophthalmological Society, in regard to public announcements of devotion to special practice in diseases of the eye, and to the like assumption of the title of oculist. We are glad that such an action has been inaugurated by specialists, for, if we are correctly informed, a very large proportion, if not the majority of the members of this Society are such. It is not then a movement actuated by any jealousy of the successful system of special practice. If it were so, or if the movement were made by general practitioners, with any motive whatever, it would certainly have caused offense. As the case now stands, no respectable practitioner in diseases of the eye can assume the title of oculist, or make printed announcement of his devotion to such practice, without full knowledge that the judgment of a large and respectable body of his peers is unanimously against him.

"How, now, does this leave the subject of specialism or of exclusive specialism? Is it any condemnation of the system? Does it involve any abandonment of the plan, so prevalent and so popular in the larger towns and cities, of exclusive devotion to the study and treatment of the diseases of certain organs of the body? By no means. It leaves that system intact. This action has no reference to it. Specialism in practice is founded on the needs of suffering humanity, and all the resolutions in the world which may be made against it will be as impotent as bulls against a comet. But this action does do the following. It aims to cauterize the fungous outgrowths of a healthy movement. It frowns on advertising under whatever garb, on unprofessional assumption of any title, beyond that granted us by our diplomas, or achieved in a legitimate and authorized way.

"General practitioners have always been compelled by the good sense of the ethics of the profession, to attain their practice in the slow but certain method of careful devotion to the business which comes to hand, sent by some friend who knows what efforts have been made by the would-be practitioner to acquire the knowledge and skill necessary for his work, or in some other similar and professional manner. Why then should a young man, who after graduation in medicine has superadded to his general knowledge special investigation of any organ, claim any exemption from his brethren in this tiresome but honorable tarrying in Jericho till his beard be grown? Let such an one not fear that

his claims will be overlooked. His professional brethren who have not enjoyed or wished the opportunities that he has, will be glad of his assistance in all cases belonging to his department.

"The broad avenues to professional success—practice among the poor, participation in the proceedings of medical societies, the use of the medical journals, the cultivation of the acquaintance of medical men around him—are all open to him. This action checks my tendency to make specialists a separate class like the dentists, nor will they stand in any danger of being confounded with those pretenders and scoundrels, whose only claim to practice is the assumption of the title of oculist, and the publication of long advertisements of skill and cures.

"This action was needed. Unfortunately some men of deservedly high rank in the profession have assumed that by becoming specialists they became a law to themselves, and that they were not amenable to the code regulating the habits of general practitioners. We are not now referring to specialists in eye diseases particularly. They have taken the liberty, in the way of announcements, cards, etc., in the daily prints and through other unprofessional means, of calling attention to their especial study and practice. However much this innovation in professional habit may have been countenanced by men who should know better, and who would not allow it in general practitioners, we are confident that it would never have been permitted by the profession in general. It would be easy to show that such action is clearly against the spirit, if not the very letter of our code of ethics; that it is unjust to those who are practicing in the same way, but those who have not the position requisite to thus coolly scout the cherished principles of our ancient guild—but this is unnecessary. It is to be hoped that this action of the only national body of specialists in our country, will not fail to be duly considered and acted upon by all of those members of the regular profession who, like them, are devoting themselves to the investigation and treatment of one class of diseases.

"To be a good physician and surgeon is high honor; to be, besides this, authority on one class of diseases, is higher; but to set aside ancient titles, given on account of work done and knowledge acquired, in order to assume one of self constitution, or to attempt to advertise skill, is not honor, but disgrace. Let us go on together, each in his peculiar way, as his taste, skill, education

and opportunities best fit him, let us not be divided into miserable factions, but be 'one body fitly joined together.'

"Such a course will in no manner interfere with the development of ophthalmological, obstetrical, otological or other special societies, nor will it discourage special study or special practice; but it will stimulate all these to a healthy growth, while at proper times it will enable us as a profession to present a solid front to the hosts of quackery, under our honored name of Doctors of Medicine."

During the transactions of the Society, to which I shall refer again when they are printed, it was found that there was a considerable number present who have assiduously cultivated aural science; and it was, therefore, resolved to organize an Otological Society to meet for the first time at Newport, on the Tuesday before the third Wednesday of July, 1869, the latter date being fixed for the next assembling of the Ophthalmological Society at the same place.

The Otological Society has adopted the Constitution and By-Laws of the Ophthalmological Society, with the necessary verbal changes, and of course the amendment in regard to advertisements, etc., applies to that organization also.

All medical gentlemen, whose qualifications accord with the above article of this constitution, are cordially invited to be present, and take part in the deliberations of that occasion. Let us inaugurate an era in American Aural Science, and do what we can to rescue this interesting and most important branch of our profession from the domain of quackery.

E. W.

The Latest Phase of Cataract Extraction.

We are told that history repeats itself, and no better example could be desired than is found in the literature of the treatment of cataract. In this, as in all departments of science, it is *novelism versus antiquarianism*, the one ever dishing up old discoveries and modes of practice as new and original, and the other intent on tracing everything back through the long vista of time, to the days of Hippocrates. If there is "no new thing under the

sun," we are permitted, at least, to see the same old objects under an infinite variety of shades and colors, and enjoy a sweet delusion. The old luminary gratifies our desire for novelty by lighting up the world with endless tints and variations. So, if the facts of ophthalmology have ever existed the same, we may still claim to see them now with the accumulated light of science and by the aid of improved apparatus. We have learned to see what the ancients never saw, and to do what the same worthies never did. The world moves in spite of maxims, and science progresses over the ruins of error and superstition. The progressionist drives ahead, while the conservative, with his wet sheets and downbrakes, quakes with fear, shrugs his shoulders with evil omen, and sighs for the mudwagons of the venerated fathers. While each of these characters is useful in his way, it is to the live men of the profession, and not the fossils, that we owe the brilliant achievements of modern ophthalmology. On the question of the safest and best means of relieving cataract, we have seen some clinging on to the obsolete method of couching, and sinking with it beneath the waves of progress. The same thing is now witnessed in regard to Daviel's corneal flap extraction. It is waxing old and ready to pass away in favor of a better practice, and yet there are a few that have ever stuck to it through evil and through good report. In Germany Von Graefe leads the van in favor of modified linear extraction, while Von Hasner is almost the only champion of the corneal flap. These two eminent gentlemen have recently had a very sharp correspondence in the European journals, of which the last pass is found in the *Annales d'Oculistique* (July and August, 1868). The state of the fight might be fitly illustrated by the *Berlin Bull* tossing a blatant *Bohemian Calf* high in the air. With extended tail, spreading hoofs and fighting look, the brave little animal is coming down with the sure fate of being again caught on one or the other horn of the *bovine dilemma*. In plain English, Von Hasner is *gone up*, and we must wait in breathless suspense for the close of the tragedy.

While this play is going on in Germany, we are startled by the sudden appearance in the arena of England, of a champion of the corneal flap. This time, however, it is an animal of another species. See *London Lancet*, September, 1868, *On Improved Methods of Extraction of Cataract*, J. R. Wolfe, M. D., F. R. S. The same description, with cuts, is reproduced in the *Annales d'Oculistique*.

Strange to say the writer, in making a corneal flap close to the sclerotic junction, embracing more than one-third of its circumference, six weeks after a corresponding iridectomy, claims originality, calls it his operation, and asserts that it "combines the advantages of all recent improvements without their risk." The only thing at all peculiar about the operation is the leaving a little conjunctival bridge to be cut, after removing the cataract knife, with a pair of scissors, which complicates and protracts the operation without any conceivable advantage. Indeed, he admits himself, that he attaches little importance to that little modification, except in rare cases. It is Desmarre's modification, but he had an object in it which the author loses by dividing it *before incising the capsule*. After opening the capsule freely, he makes pressure with the fingers simultaneously above and below, to evacuate the lens—in all of which there is nothing new or original. Therefore Wolfe's operation is nothing but Mooren's corneal flap extraction, abandoned long ago by the author of it himself. The only allusion he makes to Græfe's operation is that in the hands of Professor Arlt a subsequent operation is necessary in *ten per cent. of the cases*. "Of these secondary operations, according to Wecker, only fifty per cent. recover sight; if, therefore, two operations are to be performed, it is infinitely preferable that the *secondary* one should *precede* and not *follow* the extraction." It strikes me that lexicographers, living and dead, will open their eyes at such use of terms. Besides, it is but fair that in speaking of Græfe's operation, he should at least give Græfe's statistics, and not those of some one else. In Græfe's own cases and those of Knap, Jacobson and many others, a secondary operation is very rarely necessary.

In my own hands, with Græfe's method, I have only had to make one secondary operation in thirty cases, vision in nearly all the cases that are successful at all, being equal to No. 1 of Jæger and the corresponding $1\frac{1}{2}$ of Snellen. The only thing in which this so-called original operation differs from Daviel's is the smaller flap, made a little nearer the sclerotic, and the preliminary iridectomy. From Mooreus' it differs not at all, except in the worse than superfluous *conjunctival tag*. His statistics, too, are not nearly so favorable as those of Græfe, and very little if any better than those of ordinary flap extraction in skillful hands. He gives eighty-one with *perfect* vision, two required secondary operations, two healed well but no vision, one lost by internal

hemorrhage, two lost by suppuration, one lost by iritis, making in all eighty-nine cases of senile cataract, with eighty-three successes (counting the two that required secondary operations in which the degree of vision is not stated), in eighty-nine cases, making a little less than one failure in fifteen.

The author closes the article with a numerical statement of the advantages of his procedure. 1. "It is the safest; all the different stages of the operation may be gone through with precision, safety, and almost certainty of success." This is simply *not true*. 2. "The chances of success being so high, we need not put off the operation until blindness of both eyes is complete, but may perform it as soon as one eye is blind and the other becoming so." If this *were true* of his operation, it is eminently *more so* of Gräfe's. 3. "It does not require long confinement, and does not distress the patient." *I don't see it.* 4. "It is applicable to cases of local and constitutional complications in which Daviel's operation is inadmissible." This contains a *grain* of truth where Gräfe's contains pounds, when the same statements are applied to his modified linear extraction.

This is all I need say at present of the *new* operation of Wolfe. In the last number of the *Archiv fuer Ophthalmologie* I have just read an excellent resume of the whole subject of cataract extraction by J. Jacobson, the author of the flap extraction with sclerotic incision and simultaneous iridectomy, a very great improvement on the corneal flap, however performed or combined. He concludes by giving Gräfe's as the least dangerous and most successful by far of all operations now known for the removal of cataract. This coincides exactly with my own experience, and with that of the vast majority of the ophthalmologists of the present day. In a paper read before the American Ophthalmological Society, at its last meeting, I gave my statistics with this operation, and shall refer to it again at some future period. I will just say that I operated on one patient yesterday and one the day previous, both of them bad subjects and under very unfavorable circumstances, and yet *in eight hours* from the time the operations were made, the wounds were completely healed—the patients have had no pain or trouble whatever, although I let them sit up in twenty-four hours, and the vision very satisfactory. These are not *exceptions* but the *rule*. I now seldom give chloroform, and find that the percentage of success increases as I acquire greater skill in executing the different steps of the operation. With practice,

too, the loss of vitreous and other accidents become less frequent, so that now they are very rare.

In conclusion I must refer to an operation gravely set forth in a small pamphlet within this year called "Querextraction" of cataract, by Dr. H. Kuechler, of Darmstadt. It is made by a narrow knife, similar to Graefe's, which is passed straight through the base of the cornea with the cutting edge directly forward. After making the counter puncture the back of the knife rests against the iris and anterior capsule corresponding to the center of the pupil. The incision is completed by cutting directly forward and marks the central horizontal meridian of the cornea. He then incises the capsule and squeezes out the lens. He insists that the linear opacity through the center of the cornea is very slight after the healing, and impairs vision but little. The author, after setting forth the peculiar facility and the superior claims of this operation, gives an analysis of twenty-seven cases. Of these twenty-six healed by first intention, in one there was suppuration of the wound, in six peripheric adhesions of the iris, retention of cortical masses in seven, prolapsus of the vitreous in six, collapse of cornea during the operation in six, and secondary iridectomy in ten. In eighteen "perfect sight" was obtained. (?) Of the other ten five were able to read "coarse print," four were only restored to a "weaker sight," in consequence of previously diagnosed complications, and only one eye was completely lost. He closes the communication by *three pages of aphorisms, thirty-three in number*, on his Querextraction. The last runs as follows: "The Querextraction thus executed solves the problem of extraction of cataract in adults in the simplest, easiest, surest and most natural way." The Gordian knot is cut! How easy and how natural!

E. W.

Report of Cases.

BY A. D. WILLIAMS, M. D., Cincinnati.

CASE FIRST—*Quinine in Specific Iritis.*—Mrs. —, aged forty-five, German, midwife for a long time in a German hospital, and has practiced considerably since she has been in this country. She contracted syphilis some time since, either in her profession or from her husband. The secondary symptoms made their

appearance, and in connection with them specific iritis in one eye was developed, and from this the patient suffered intensely. The usual antisyphilitic treatment was adopted, which consisted in leeches and atropine solution locally, and iodide of potash with corrosive sublimate internally. Under this treatment the disease slowly gave way, the redness and pains gradually disappearing. About this time the other eye was attacked with iritis. This yielded likewise slowly under the same treatment. The eruptions over the surface of the body passed away as the treatment progressed.

But what is somewhat singular, and to which I wish to refer more especially, is the fact that after each eye had gone through one attack of iritis, and had apparently at least entirely recovered, repeated attacks of iritis, acute in form, could not be prevented by the continued treatment. Although the syphilitic symptoms were gradually disappearing, still the repeated relapses of inflammation in the eyes would return in spite of everything. Sometimes in one, sometimes in the other, and at other times in both. The time between the attacks would vary from one to three weeks. In the attacks the eyes would get very red, especially around the margin of the cornea, the sclerotic would become very much injected, causing the usual peri-keratic zone, which is one of the characteristics of iritis. This was always attended with intense suffering, both in the eye, around the orbit and through the head, especially when both eyes were involved at the same time, would the head symptoms be particularly severe. The suffering would last from five to seven days, and then slowly pass off.

The treatment did not seem to have any special influence over the pain. Usually in such cases the energetic use of atropine will control the suffering, but here it failed entirely. Nothing but very large doses of morphine or opium would give the patient a few hours ease. The hypodermic injection of morphine would give the most perfect and longest relief, generally lasting about twenty-four hours, sometimes longer.

These opiates, however, would always interfere with her appetite, make her sick, and injure her general health. So they had to be discontinued.

The patient being nervous and weak, and a general want of energy showing itself in consequence of the opium, I concluded I would try a pretty large dose of quinine twice a day and see

what it would do. I ordered five grains to be taken morning and evening, the atropine and antisyphilitic medicine to be continued as before. To my surprise the first dose of quinine relieved her suffering entirely, so that she got a perfect night's rest. Repeated the quinine next morning, and the patient had no pain during the day. Continued the dose only at night for two or three days, and by this time the eyes had got to be quite clear and nice. Discontinued quinine for a few days, and another relapse came. Renewed it, and the first dose stopped the pain. The eyes soon became clear again. I now advised the patient to take three or four grains of quinia every fourth or fifth night, with the hope that it would prevent the relapses. She followed directions, and since that time, five or six weeks ago, has had no return of the trouble, and she now considers herself well in every respect. The atropine I discontinued some time since. The antisyphilitic solution she is still taking, as she still has some evidence of syphilis in the palms of her hands and in the matrices of her nails. As soon as that disappears I shall discontinue the medicine.

On account of the interesting fact that quinine not only controlled the suffering and relieved the specific iritis, when the ordinary remedies had failed, but also prevented repeated relapses of that specific inflammation, I have given a detailed account of this case, which was very interesting to me. I hope it will prove of interest if not of service to others. In what way the quinine operated so favorable is more than I can say. It is not known that it has any special influence over specific iritis or over specific inflammations of any kind. Certainly the inflammation and consequent pain could not have been induced by any malarial influences, for so far as I know syphilis is not influenced in that way. These attacks were not strictly periodical, for they were quite irregular and had no special period to make their appearance. The general antiperiodicity of the remedy would not, therefore, explain its action in this case, for there was no periodicity to be broken up or destroyed. If a similar case presents itself again, I shall most certainly try the quinine treatment again.

CASE SECOND—*Atropine Poisoning—Is Morphine an Antidote?*—Mrs. B—, aged thirty, an American, small, delicate, thin and very weak, nursing a baby. Contracted syphilis some months since and had specific iritis, from which she suffered severely, and

on account of which she presented herself some weeks since. I ordered leeches, atropine solution (four grains to ounce) and antisyphilitic treatment internally. A teaspoonful of the latter was to be taken three times a day. The atropine solution was ordered to be dropped into the eye five times a day.

Having the eye water and medicine sitting together, she took by mistake a teaspoonful of the atropine solution. As soon as she had swallowed it she discovered her mistake, and instead of taking an emetic instantly she started off to the office, a walk of half an hour, to know if the eye water was poisonous. When she reached the office the atropine had begun to affect her. An emetic of mustard and salt was given immediately, and after some little time a slight emesis was produced, a little undigested melon was thrown up. By this time she became so sleepy and depressed in feeling that she could not sit up. Very indifferent, listless, and difficult to rouse from her apparent stupor. Her mouth and throat by this time became very dry, voice very husky, and patient could not speak above a whisper, in fact, it was difficult to get her to make any effort to speak. Did not complain of pain at all, rather felt comfortable and wanted to be let alone. Soon after the emesis a half grain of morphine was administered. Half hour later could not get her to swallow anything; so that we could not give her any more morphine, as we tried to do. About six o'clock her friends took her home with orders to rouse her up every little while, and not let her get into a deep sleep.

Called to see her at ten o'clock. Found her lying in bed, but hardly so sleepy as she was. Difficult to rouse, and wanted to be let alone. Seemed to be restless, would throw her hands about and pick at imaginary things in the air. Ordered morphine in half-grain doses every four or five hours during the night, but could not get her to take it. Directed the attendants to watch her closely and not let her sleep much. Disposed apparently to get up and jump out at the window. Seemed to be afraid, and wanted to get away or out of the house.

Next day found her a little less disposed to sleep, could rouse her easier, could speak so as to be understood when wakened. Still delirious, however, and would pick at things in the air, as persons frequently do in the delirium of typhoid fever. Her appearance and actions reminded one of delirium tremens. Such might have been the diagnosis, had it not been known that she had taken atropine.

Tried her with another half grain of morphine, which she took. In a few minutes afterward she became quiet, ceased to be delirious, slept quietly, could be wakened easily, and would answer questions rationally. The morphine was to be repeated as often as she became unquiet. She took two or three powders during the day and night. Next day was quite well, had considerable appetite. Ordered Huxham's Tincture as often as necessary to quiet a little nervous disposition.

A couple or three days later she was quite well, and began again the use of the atropine solution in her eyes and her antisiphilitic medicine internally.

I have always had doubts about morphine being an antidote to the poison of atropine, but from what I saw in the above case I am satisfied that if she had had more morphine at the start that the severity and duration of the atropine poison would have been cut short by considerable. The patient being *already* poisoned, it seemed to me at least to be very *irrational*, not to say the height of folly or foolishness, to give her another poison.

If it was to do over again I would give her at least a grain of morphine as soon as the emesis was produced, and repeat it by half so much in an hour or hour and a half if she did not get relief from the first. It would be advisable to push the morphine to about the utmost extent a person would bear in health, if not even beyond a little. If the patient can not swallow it, it might be injected under the skin, where it would take effect much more suddenly.

It would be interesting to know *how* morphine *antidotes* atropine, but medical science at present can not explain the fact. The amount of atropine taken by this woman was about half a grain. One-thirtieth of a grain is regarded as a hazardous dose.

The very frequent use we make of atropine in ophthalmology, makes us perhaps more careless about directions in regard to it than we ought to be. Not long since a young lady patient was using a four-grain solution of it in her eyes. She put it away carelessly on the table, and one of the little children got hold of it and drank all there was in the bottle. There did not happen to be enough left to hurt it. We can not be too careful with it, for it is very dangerous, especially among children.

CASE THIRD—*Deafness from Tonsilitis Chronica—Amputation of Tonsils—Recovery.*—Michael —, a boy aged twelve, American Irish, robust in appearance, but very scrofulous. Has been quite

deaf from early childhood. Difficult to talk to him. Have to hollo at him to make him hear. Can not go to school well on account of his deafness. Hears the watch close to each ear. Mother says he has always snored *terrifically* at night. Made so much noise in his sleep that he would often keep her awake; although she slept in an adjoining room. She would often go and turn him over for fear he would suffocate.

Upon examination the ears externally appeared natural. Patient complains of noises in his ears. Blows as he breathes as though his breathing was obstructed. Upon looking into his throat it was found that his tonsils were greatly enlarged and very hard. Surfaces irregular, marked by considerable depression. They filled up completely the spaces between the pillars of the soft palate, and projected inward so far that they nearly met in the center, leaving a space of not more than two or three lines between their apices. The general mucous membrane of the throat was quite red and considerably swollen, and somewhat uneven. The tonsils were evidently the seat of the original trouble, the mucous membrane being involved secondarily.

The tonsils, too, were evidently the cause of the difficult breathing, especially at night. They also were, in my judgment, the cause of the deafness, by *physically* obstructing the eustachian tubes by pressing upward against their mouths. It may be also that the inflammation and swelling of the mucous membrane had extended into the tubes, and even into the tympana, but the appearance of the membrana tympani did not indicate that the mucous membrane of the tympana was inflamed. Evidently, therefore, the enlarged tonsils were the *chief* if not the *sole* cause of the deafness.

This then being the diagnosis, the indications for treatment were simple. Remove or reduce the tonsils, and deafness would disappear. The easiest, best and surest way to do this, in my judgment, is to amputate or exterminate them. I prefer to amputate, it not being necessary to take out the entire tonsil. I advised and, in fact, urged the amputation of the tonsils in the case under consideration. The boy would not consent. I told the mother to persuade him into it. She went off, and in a few days returned and the boy sat down and I amputated one of them. Went away with directions to wash his throat with cold water till the bleeding stopped, and as soon as the throat begun to get sore to gargle with warm water. In about ten days returned

much better. Could hear well with one ear, corresponding to the side where amputation was made. Patient sat down and I amputated the other tonsil. Gave the same directions as to after-treatment. In two weeks returned much delighted. Could hear perfectly, the mother could sleep well, the boy having ceased entirely to snore; the throat well. The treatment and its result confirmed the correctness of the diagnosis. In amputating the tonsils I aimed to take them off about upon a level with the pillars of the soft palate. That is sufficient, the tonsil will shrink up, and there is no danger from hemorrhage. If you attempt to take out the entire gland, you may cut a large blood-vessel and have serious bleeding. There is but very little after-amputation. After-treatment as above directed. I have tried the tonsilitome but have abandoned its use entirely. In my judgment it is a worthless thing. I now use a knife. The probe-pointed bistoury in every pocket case answers the purpose admirably. Take hold of the apex of the gland with a fine hook, and with the knife cut through the body of the tonsil at the desired point, thus amputating it. Of course an assistant will have to depress the tongue.

It may be asked, why I did not try to reduce them by treatment? Simply because I had no faith whatever in such treatment. I have tried, I think, faithfully everything that has been recommended, but without the least success. Now I do not hesitate to recommend, and even press the amputation in every case like the above. If the patient does not consent I refuse to treat him.

Editor's Table.

THE ACADEMY OF MEDICINE.—After the usual vacation for hot weather and short evenings, the Academy has resumed its weekly meetings with a full attendance, and more than usual interest. We publish in this number Dr. Unzicker's report on New Remedies, with an abstract of remarks upon it. This report led to a motion to petition the Board of Health for an Inspector of Drugs for this city. The petition was heard by the Board, and favorably reported on by a special committee, but no final action has

been had. Thus, it will be seen that the Academy continues to exert its influence upon those questions which pertain to the public interest and health.

Much of the time, for several months of the last year, was occupied in the discussion of the *nature of Diphtheria*. Incidentally this called out views of treatment; but the main point was to determine what constitutes Diphtheria. We have published what we thought fairly represented the leading disputants; though by no means attempting to publish all that was said of interest. In our September issue we closed up our extracts from this extended debate, with full reports of the remarks of Drs. Bartholow and Davis. In a previous number of the journal, we printed a report of remarks by Dr. Richardson; to this was prefixed a statement by Dr. R., introduced by way of placing himself right before the readers of this journal. We varied from our custom in admitting these remarks, because the Doctor considered himself placed by Dr. Davis in a false position, and as the Academy had adjourned without an opportunity to correct in the proper place. Still this makes it proper to admit Dr. Davis' rejoinder, which appears in the present number. These communications, however, being purely of a personal character, and in no way of benefit or interest to the general reader, can not be permitted to continue. We print reports of the Academy exactly as furnished by the Secretary, and if any one is aggrieved, he must appeal to the Academy for redress.

AITKEN'S PRACTICE OF MEDICINE.—We have received from the publishers, Messrs. Lindsay & Blakiston, the first volume of a new addition of Aitken's Practice. The next volume will appear in a few weeks. Few works on practice have so promptly taken captive the profession, and this early demand for a new edition shows the estimate in which it is held. Although the first American edition of Aitken seemed remarkably full, yet we notice that this edition will contain additions by the American editor, Dr. Clymer, equal to about three hundred pages, upon some of the most important practical points in medicine and pathology. Dr. Aitken has himself added many new articles (twenty-two) not embraced in the previous editions. Volume II., of the present edition, will appear early in October, when we hope to notice the entire work more systematically.

DR. DRAPER'S "CIVIL WAR IN AMERICA."—Volume I. of this valuable work was fully noticed in this journal. We observe that the second volume is issued by Messrs. Harpers, though as yet we have not had the pleasure of perusing it. When received we will advise our readers.

DETROIT MEDICAL COLLEGE.—This new school of medicine for some time agitated, now announces as a fixed fact. The first course will commence Feb. 2d. 1869, in good time to catch the Ann Arbor students. The faculty is made up of good men; Jenks, McGraw, Andrews, Duffield, Gilbert, Lathrop and Noyes. The fees are \$50 for Tickets. Detroit has good hospital facilities, and ought to command good classes. We hope she will succeed and do good.

PROF. AUSTIN FLINT IN BUFFALO.—Some month or two ago, Prof. Flint made a visit among his friends and former associates of the city of Buffalo, where he resided for twenty years. The profession through a formal, but highly complimentary letter, invited the doctor to a public dinner. His engagements prevented his acceptance, but he responded in a letter of acknowledgment, highly creditable to the heart of the writer. These courtesies are well. They duly recognize industry and worthy success, and are the pleasant places for us in our journey, making the way smooth, and hiding for the time the thorny annoyances of our professional life.

PROF. COMEGYS.—CHLOROFORM IN INTERMITTENT FEVER.—Dr. Comegys has been engaged in experimenting with chloroform inhalations in the paroxysms of intermittent fever. In a note to the *Western Journal* he says:

"My standing direction to my assistant is to give chloroform by inhalation as soon as the chill supervenes; and in every case complete relief is obtained in from three to five minutes, the latter period only when a secend administration is requisite, which is rare.

"The reaction is quickly established, and, according to our observation, the fever is of much shorter duration, and the body heat is less intense.

"A small quantity, only, is needed. It is not necessary to render the patient unconscious; and in cases of rigors, (or nervous chills, as frequently called), connected with an exhausted state of the system, I have found it equally efficacious."

PROF. TAYLOR IN EUROPE.—Prof. W. H. Taylor of the Miami Medical College has gone abroad to remain for a year or more. He will visit the most important cities, hospitals, etc., in Europe, and devote himself to studies in pathology, diseases of women and children and general practice. At present he is in Berlin, where he will probably remain for the winter. Dr. Perrine will give his lectures in the college this session, an arrangement which will prove satisfactory to the friends of the school.

PROF. GOBRECHT, of the Medical College of Ohio, is also in Europe; but we learn will return in time to give his course of lectures.

Cincinnati is well represented otherwise, by several of our young men, whose letters in the *Lancet and Observer* show that we can trust our credit to their good keeping.

NEW JOURNALS.—We have received number one of a new journal from the *Dominion of Canada*, styled the *Dominion Medical Journal*, edited by Llewellyn Brock, Esq., M. D., Toronto. Its appearance is good, its contributions are of interest, its editorials have a good flavor; but we regret to see its advertising pages defaced with the announcement of a notorious Eclectic concern in Philadelphia. We don't know whether our Canada friends have any recognized system of ethics; but in "The States" they don't do such things. Dr. Brock you must keep both eyes open, if you are going to become a leader of medicine in Ontario. Philadelphia University is not recognized, even if J. Lizars Lizars is Professor of Surgery.

THE MONTHLY MEDICAL REPRINT, is the title of a monthly publication, designed to reproduce the "most valuable articles" in recent issues of the British medical journals. It contains sixty-four large double column pages each month, published for five dollars a year. Address John Hillger, 14 South William-street, N. Y. Will the publisher please send us number one, July, and oblige?

THE NEW YORK JOURNALS.—We stated last month that the Messrs. Appleton, of New York, had become publishers of the *New York Medical Journal*, and the *Psychological Journal*, and we came very near writing down the *Gazette* as defunct! We are glad we didn't, for Dr. Carroll is one of the men who never say die. He declares he isn't dead, and means to live right along. Vol. I of the *Gazette* is about expired, not the *Gazette*, and we are happy to learn that Vol. II. will appear in a new shape, similar to the *London Lancet*. The *Obstetrical Journal*, we understand, is to be published, hereafter, by Townsend & Adams, well known as publishers of the *Retrospect*. We see it announced that No. 2, of this quarterly is issued, but it has not reached our sanctum.

PEPSINE IN INFANTILE DIARRHEA.—Dr. Hawley, of Greenpoint, L. I., recommends the use of pepsine in the treatment of the diarrhea of infants. He give it in five grain doses repeated every three hours.

CORRECTION.—In the report of Dr. Eastman's case as given page 526, September number, *Suppression*, in the title, should read *Retention*; and the word *Retroversion*, of course, is misprinted.

TO CORRESPONDENTS.—Accepted articles are on hand from Drs. Morse, Rooker, Haynes and Grey, which will appear as we have space.

THE DEAD ALIVE.—Here is something gay in the way of inventions. You recollect Edgar Poe's catalepsy coffin, with inside cushions for comfort, and springs for the moment of waking. The idea was very elementary and perhaps practical. But a Frenchman has beaten it all to pieces. He calls his invention a "Respiratory Advertising Apparatus for Precipitate Inhumations." You can see the mechanism of the thing from where you are. "You can breathe while notifying the outside world that you are resurrected." What *naivete!* By this invention the buried individual puts himself in communication with the living by means of a tube fixed over the mouth with a funnel-shaped mouth-piece, the other end projecting from the earth or stone above. "If the individual," to quote the prospectus, "finds himself uneasy in his

position (!) he has only to demand the attention of the guardians of the cemetery, which he can easily do, and his case will be attended to at once."

So that if this ingenious invention comes into general use, the people who select the cemeteries as a place of resort, must not be surprised hereafter at hearing queer sounds, from time to time, proceeding from the earth around them. We can imagine the surprised promenader exclaiming to the guardian: "What! you allow people to play the trombone here?" and the guardian replying: "That's no trombone. It's the old fellow of yesterday—down there—the seventh to the left—who demands a change of base!"

The inventor thinks no family ought to be without one of his tubes. The charming man! Pretty soon he will pretend that children cry for them.—*Paris Cor. N. Y. Times.*

THE Medical and Surgical History of the Rebellion, being compiled in the Surgeon-General's office, seems likely to be delayed in publication through the failure of sufficient appropriation therefor. Sixty thousand dollars were appropriated by the act of June 8, 1868, for the publication of this history and the medical statistics of the Provost Marshal's Bureau—thirty thousand each. The superior cost of the first causing some trenching on the resources of the second, a special resolution was passed July 25th, ordering the balance of the appropriation to be devoted exclusively to the Provost Marshal's figures. This action is exceedingly to be regretted, for the profession were looking to the completion of the former work with very great expectations of benefit. It is to be hoped that some means will be afforded during the coming session, to expedite this most important work.—*Chicago Medical Journal.*

AN AMENDMENT TO THE CODE OF ETHICS.—At the last meeting of the Iowa State Medical Society, and during the supper, the following humorous toast was proposed:

1st. The two Presidents, Drs. Watson and Whitman, shall be expected to wear their hair parted on the top of the head as a mark of contradistinction, and in this consultation they shall be considered the prominent symptoms. [Cheers.]

2d. It shall not be deemed unprofessional for any bachelor

member of this Society to pay *special attention* to women and children in any case of actual disease or in-fatuation. [Cheers.]

3d. It shall be the privilege for any member of this Society to be sick on any very dark or stormy night; provided, however, that he shall recover the following morning. [Cheers.]

4th. No member of this Society shall hereafter report more than four fearful accidents per day to the daily papers, nor have a sign more than ten feet in length—nor an advertisement of more than one column in any newspaper—unless he shall advertise that he will give *special attention* to something, or that he has been a surgeon in the United States Army. [Cheers.]

SUIT FOR MALPRACTICE.—Professor L. C. Lane has been the subject of a suit for malpractice in the Fourth District Court of California. He had operated for artificial pupil on an eye that had been injured and blinded, and in which the operation was performed as the only possible means of restoring its vision, though without any sanguine hope of success. The eye was not improved afterward, and the patient, prompted perhaps by some unprincipled advisers, thought to extort money from his physician by a suit for malpractice. The first suit, brought a year ago, was withdrawn by the prosecutor, just as the doctor was prepared and anxious to go into the trial. A second suit was instituted, other counsel being employed, and the case had a hearing before Judge Sawyer on the 27th of August. The day was occupied in examining witnesses for the prosecution, and when that was completed, and all the testimony presented which the industry and ingenuity of the plaintiff and his attorneys could accumulate, the Judge refused to permit the case to go to the jury, as there was not a particle of evidence to sustain the allegation. A more barefaced attempt to extort money under cover of a suit for malpractice can hardly be imagined. A number of physicians and irregular practitioners were called to the stand, in the hope that the prevailing propensity of medical men to differ from each other would elicit some ground on which to rest the accusation. But, for once, an exemplary disposition was exhibited by all the witnesses to be faithful to the profession, and to sustain the accused against what was manifestly an unjust prosecution. Even the irregular practitioners who were called to the stand, showed by their answers that they felt an interest in upholding the rights and reputation of the regular profession.—*California Medical and Surgical Journal.*

M. FOLKER reports to the *Gazette Medicale* a case of poisoning by swallowing three grains of strychnine, which was successfully treated by inhalations of chloroform. This is the second case reported.

Reviews and Notices of Books.

Lessons in Physical Diagnosis. By Alfred L. Loomis, M. D., Prof. of the Institutes and Practice of Medicine in the Medical Department of the University of New York, etc., etc. New York: Robt. M. Dewitt, Publisher.

In the neat little volume before us, Prof. Loomis claims no credit for originality, but to arrange a plain compend of the principles of the art of Physical Diagnosis; but, notwithstanding this modest preface by our author, he has furnished us a very good little book. It is divided into fifteen lessons, embracing a fair outline of the whole subject, and the illustrations of the various structures treated of are such as to afford a very satisfactory hand book to the student desirous of familiarizing himself with this subject.

The first five or six lessons are devoted to general principles—the topography of the thoracic walls, inspection, mensuration, auscultation, percussion, etc. Two lessons give a synopsis of the physical signs in the diagnosis of pulmonary diseases. Four lessons are devoted to the heart and its abnormal conditions. Then in turn the several abdominal organs are studied *seriatim*.

We think our readers will profit by a study of this little book. For sale by Robert Clarke & Co. Price, \$2.

On Diseases Peculiar to Women, including Displacements of the Uterus. By Hugh L. Hodge, M. D., Emeritus Prof. of Obstetrics and Diseases of Women and Children in the University of Penn. *Nullius addictus jurare in verba magistri*, with illustrations. Second Edition, revised and enlarged. Philadelphia: Henry C. Lea, 1868.

Few Obstetric teachers in this country have enjoyed a larger amount of confidence and esteem than Prof. Hodge, and the pro-

fession, generally, have been disposed to look with interest to the few publications which have appeared from him. Eight years ago we had the privilege of calling the attention of our readers to the first edition of the work before us, and, at that time, we directed the attention of our readers particularly to the peculiar stress which the learned author places upon the influence which *irritation* exerts upon the female economy, and those diseases to which the sex are liable. Prof. Hodge regards a large proportion of the diseases of the uterus as dependent upon irritation rather than inflammation, and teaches that the treatment varies with this modified theory of pathology.

The present edition contains considerable additional matter, which seems to be partly the result of criticism on the previous edition, and partly the continued maturer views of the author. The subject of metritis is elaborate. There is an introductory chapter reviewing the opinions of various high authorities on the leading topics of the work, together with some other improvements and revisions. For sale by R. W. Carroll & Co. Price, \$4.50.

Conservative Surgery in its general and successful adaptation in cases of severe Traumatic Injuries of the Limbs, with a report of cases. By Albert G. Walter, M. D. *Praestat Naturae voce doceri, quam ingenio suo sapere.* Pittsburg: W. G. Johnston & Co., Printers.

The author of the little monograph before us, is one of the most prominent surgeons of Pittsburg, and he has had the opportunity to record an experience that must prove valuable as a means of instruction. The title given above very cleverly expresses the object in view by our author, except, that if the reader expects to find an essay on the subject, he will be mistaken. Almost the entire two hundred pages of the interesting little volume is occupied with the narration of cases, each serving as a text for some running commentary enforcing the views of the author. The main idea of the writer is to show from these cases, that a large number of accidents, heretofore deemed imperatively doomed to the amputating knife, are legitimate cases for the efforts of conservative surgery. Another point enforced, is the impunity with which pure atmospheric air may be admitted to wounds; and while he does not entirely deny the value of *carbolic acid* as a surgical appliance, yet he does not admit the importance that is

demanded for it as an antiseptic. Upon this point the views of Mr. Canniff, recently given in the *Canada Medical Journal*, are quoted in contrast with the views of Mr. Lister of Glasgow, who is a strong advocate of the protecting power of carbolic acid. Dr. McElroy's views on the nature of inflammation, as given in the May number of the *Lancet and Observer* for the present year, are quoted in illustration of the opinions of the author, especially in support of the assertion that the admission of air to wounds does no harm whatever.

The history of more than sixty cases are detailed in Dr. Walter's monograph, and for the most part he permits the plain story of each to make its own argument upon the several points of "conservative surgery" presented. Such contributions to surgery are valuable, and we trust that they will have a wide circulation.

The Physicians Visiting List, for 1869.

The Physicians Hand Book, for 1869.

These little pocket books are both well known to the profession, some preferring one, some the other, according to taste or usage. The Visiting List is by Lindsay & Blakiston, and has met with great favor. It is published in several forms and sizes to accommodate the views of the physician. The Hand Book is issued by Townsend & Adams. The arrangement is something different, and is preferred by many. With both there is too much matter aside from the daily memoranda, increasing the bulk without any corresponding value. Any physician who needs a manual of practice, *materia medica*, toxicology and chemical analysis all crowded into his breast pocket, had better return to his pupilage.

A Manual on Extracting Teeth. By Abraham Robertson, D. D. S., M. D. Second Edition. Philadelphia: Lindsay & Blakiston, 1868.

Dental Materia Medica. Compiled by Jas. W. White. Philadelphia: S. S. White, 1868.

These are two neat little volumes on matters pertaining rather to dentistry, than medicine proper; although the subject matter of each is of interest to the regular practitioner, and the matter of tooth pulling devolves upon so many physicians, that any instruction which will aid in that vexatious sort of minor surgery will not be amiss.

The first edition of Dr. Robertson's little manual was fully noticed in this journal. It gives the anatomy of the jaws and teeth; the pathology of toothache; a chapter on the instruments necessary for extraction, and how to use them; something about lancing the gums, and the accidents attendant on extraction; and finally some remarks on anaesthetics. It is on sale by Robert Clarke & Co., for \$1.50. Mr. White's little *Dental Materia Medica* is devoted to the dental aspect of such articles as are in frequent use for various dental operations, or for the treatment of dental diseases; chalk, collodion, iodine, carbolic acid, creosote, Monsel's solution, nitrous oxide, etc., etc., are among the substances duly and appropriately noticed.

Atlas of Venereal Diseases.

Part IV. of this magnificent re-print is received, fully sustaining all that we have said, heretofore, of its beauty and completeness. This part contains the consideration of chancre and its complications, bubo, constitutional syphilis, syphilides, mucous patches, etc. The plates are life-like. One more part completes the set. For sale by Robert Clarke & Co. Price, \$3.

Obituary.

DEATH OF E. H. JOHNSON, M. D.—At a meeting of the Academy of Medicine, of Cincinnati, on the evening of September 7th, it was announced by Dr. C. P. Judkins that Dr. Johnson had deceased that morning.

On motion Drs. E. B. Stevens, J. L. Vattier, J. J. Quinn, R. R. McIlvaine and J. A. Thacker, were appointed to report at the next meeting, at which time they presented the following:

The Cincinnati Academy of Medicine learns with pain the sudden death of one of its members, Edward H. Johnson, M. D., who deceased Monday morning, Sept. 7th, 1868. Dr. Johnson was a native of Kentucky, having been born and reared in the vicinity of Lexington. At the time of his death he was in the 41st year of his age.

His literary education was obtained at Transylvania Univers-

ity, and he graduated in medicine at the Cincinnati College of Medicine and Surgery, in which institution he was Demonstrator of Anatomy for a time. He commenced the practice of medicine in this city in the year 1854, where he remained until his death. He had been a member of this Academy since October, 1860. In Dr. Johnson we recognize a quiet industrious member of this Society and the profession. He had many good qualities of head and heart, and secured many friends.

Resolved. That this Academy, regarding with sorrow the decease of Dr. Johnson, will treasure up in remembrance those excellent traits of character of which he was possessed—*de mortuis nil, nisi bonum.*

Resolved, That we take this opportunity to express our sympathy with his friends and relatives in their sudden loss.

Resolved, That in token of respect for Dr. Johnson, we place this action on our records, and publish it in the medical journals and newspapers of this city.

E. B. STEVENS, M. D.,
J. L. VATTIER, M. D.,
J. J. QUINN, M. D.,
R. R. McILVAINE, M. D.,
J. A. THACKER, M. D., } Committee.

While the adoption of this report was pending, remarks were made by Drs. Quinn, Judkins, Ludlow, McIlvaine and others, respecting the personal and professional qualities of Dr. Johnson.

Business Notices and Acknowledgments.

NEW Books.

AITKEN—Science and Practice of Medicine. Vol. I. Lindsay & Blakiston.

MORGAN—Electro-Physiology and Therapeutics. Wm. Wood & Co.

EMMETT—Vesico Vaginal Fistula. Wm. Wood & Co.

STORER & HEAD—Criminal Abortion. Little Brown & Co.

HODGE—Diseases Peculiar to Women. H. C. Lea.

HILLIER—Diseases of Children. Lindsay & Blakiston.

BARTHOLOW—Prize Essays for Connecticut State Med. Society.

ATLANTIC MONTHLY.—This monthly continues to lead off as a representative American magazine. Its contributions always mature and give something for readers to think about. The Atlantic, Young Folks, and Every Saturday, all published by Ticknor & Fields, of Boston, are regularly and promptly on our table.

GODEY'S LADY'S BOOK is the oldest and best magazine in the country devoted to light literature, the fashions, drawing and architecture.

PALMER'S ARTIFICIAL LEG.—An order for sale at this office.

A MICROSCOPE FOR SALE.—We have had left at this office, for sale at a low figure, a *Microscope*, made by a first class maker, but not in perfect order.

To PHYSICIANS.—Location for sale in North Liberty, Knox Co., Ohio. Being a good dwelling house, good well, stable and office, in a thriving little village. A good country surrounding, and good pay; business amounts to two thousand dollars per year. For Sale on the most reasonable terms.

Address

J. M. McLAUGHLIN,
North Liberty, Knox Co., Ohio.

DR. THOMAS C. HENRY,
FORMERLY (1852—1860) OF THE REGULAR ARMY.

174 West Fourth St., Cincinnati.

NOTE—SPECIALTY.—Laryngoscopy, Rhinoscopy and Diseases of the Air-passages by the German method. Dr. H. also examines candidates for admission into the Army Medical Staff.

TO PHYSICIANS.

Prof. Horatio R. Storer will deliver his fourth private course of twelve lectures on the Treatment of the Surgical Diseases of Women, during the first fortnight of December, with illustrative operative instruction at the Franciscan Hospital for Women, under his charge.

Fee \$50, and Diploma required to be shown. Certificates of attendance upon the previous courses have now been issued to twenty-nine gentlemen in different parts of the country.

HOTEL PELHAM, BOSTON, September, 1868.

THE CINCINNATI LANCET AND OBSERVER.

E. B. STEVENS, M. D., EDITOR.

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Original Communications.

ART. I.—*Cerebral Circulation.*

A Lecture delivered at Charity Hospital Medical College, Cleveland, O., Dec. 6, 1867.

BY D. A. MORSE, M. D., of Midway, Ohio.

GENTLEMEN: We have discussed the circulation as observed in the *Heart*, the *Arteries*, the *Capillaries* and the *Veins*, these four constituting one complete circle, each of which having its individual peculiarities, deserve a special consideration. Besides these general considerations, there are others of great importance to every practitioner who desires to encounter disease with success, and who does not blindly fall into error from ignorance of a few principles readily grasped. The knowledge you have obtained of the circulation will now enable you to better comprehend what may be presented upon the remaining points connected with our subject, viz: *cerebral circulation, the pulse and effects of loss of blood.*

When we observe the influence of the nervous centers upon the force and frequency of cardiac action, we also perceive that it is no less incontestible that these same nervous centers are dependent upon cardiac integrity, and the perfect circulation of blood through them. That the brain may perform well its labor, that its functions may be vigorously performed, healthy arterial blood must be supplied. It is no less necessary that this supply be maintained, than that there be no obstacle to prevent the return

of venous blood to the heart. The present lecture will discuss this circulation: 1st. As performed unmodified in health—the modification consistent with health. 2d. The modifications of disease. 3d. The influence of the heart upon cerebral circulation.

The first point is that of health and its modifications. There are two main views entertained concerning this subject. The first, that the mechanical structure of the cranium is such that *the absolute quantity of blood is never subject to variation*. The other, that *the quantity of blood circulating at any one time within the cranium is subject to an increase or diminution*, that it may constitute what is termed plethora, hyperemia or congestion. At the bedside you will hear the expression frequently used, "this patient has congestion of the brain," or "a determination of blood to the brain." Can this condition exist?

The first author of note who wrote advocating the view of an unvarying quantity of blood was Dr. Monro. He regarded the substance of the brain incompressible, and the quantity of blood always the same within the cranium. He illustrated his views by filling a glass globe with water, and calling the attention of the class to the fact that none of it escaped when it was inverted. Dr. Abercrombie advanced views in no way materially different from those of Monro. He found that animals bled to death presented a brain with vessels distended with blood. When the skull was trephined the brain was found bloodless. Nearly all explanations made of the phenomena of cerebral circulation are based upon the peculiarities of the structure of the head—the principles of physics involved.

Dr. Kellie uses these words to explain his views:

"The cranium is a complete sphere of bone, which is exactly filled by its contents, the brain, and by which the brain is closely shut up from atmospheric pressure, and from all influence without, except what is communicated through the blood vessels that enter it. In an organ so situated it is probable that the quantity of blood circulating in its vessels can not be materially increased, except something gives way to make room for the additional quantity, because the cavity is already completely full; and it is probable that its quantity can not be diminished, except something enter to supply the space, which otherwise would remain vacant. Upon the whole, then, I think we may assume the position as being in the highest degree probable, that in the ordinary

state of the parts, no material change can take place in the absolute quantity of blood circulating in the vessels of the brain."

Dr. Watson in the older editions of his work asserts that the peculiar mechanical construction of the head explains the phenomena of cerebral circulation, upon well known principles of hydraulics. He refers to Kellie's experiments in which animals bled to death presented more blood in the superficial vessels than usual, and in the sinuses large quantities of dark blood was found. This at a glance reveals the inconsistency of their statements. They start out with a proposition that the quantity can not be changed, but conclude by stating that in the cases cited to sustain their theories, *there is more than usual*.

These experiments and observations are worth a thorough consideration, involving, as they do, some of the most important principles of both Physiology and Pathology.

Dr. Clutterbuck asserts in his article upon cerebral apoplexy, "that no additional quantity of blood can be admitted into the vessels of the brain—the cavity already being filled by its contents." He says, also, "a plethora may be talked of, or an overfullness of the vessels of the brain, yet it can have no real existence, nor can the quantity be diminished. No abstraction of blood, whether from the arm or other part of the general system, or from the jugular veins, can diminish the quantity of blood contained in the brain." If this be true how absurd is all our labor directed toward depletion, or all attempts made to relieve the brain by bloodletting.

Such are some of the views presented to the medical world respecting cerebral circulation. These views are, with few exceptions, based upon the experiments of Dr. Kellie. We will review his conclusions and a few of his experiments.

He concluded from the observations he made that,

"1st. A state of bloodlessness is not discovered in animals which have died of hemorrhage; but, on the contrary, very commonly a state of venous cerebral congestion.

"2d. That the quantity of blood in the cerebral vessels is not affected by gravitation or posture of the head.

"3d. That congestion of the cerebral vessels is not found in these instances when it might be most expected, as in persons who die by hanging, strangulation and suffocation.

"4th. That if there be repletion or depletion of one set of vessels in the cranium, there will be an opposite condition of the other set of vessels."

Let us review the doctor's experiments to illustrate our subject, and, also, that you may learn that many cases in which he claims to the contrary, there did exist unmistakable signs of depletion. You will also learn, before we conclude, that some healthy physiological actions are dependent upon cerebral anemia.

He reports an experiment, the 4th, in which a sheep bled to death from both jugular veins, exhibiting the following peculiarities: Blood lost 38*£*; the heart contained no blood. The sinuses of the brain were in their usual state, and those at the base of the brain contained less than he had found in similar experiments. The veins on the hemispheres were less filled, and the choroid plexus was pale and empty. The vessels on the base of the cerebrum were better filled, and those on the cerebellum were minutely injected.

Another experiment he reports in these words: "A dog was bled to death from the carotids, having lost 37*£* of blood. The viscera, in general, were well drained of blood; the dura mater contained little blood. The lateral sinuses were, however, well filled. This brain, upon the whole, seemed more depleted than usual."

Let us contrast the cerebral condition in two other cases reported by the doctor, in which he produced death, by other means, with the preceding. 1st. "Both carotids were tied, and both jugulars. The victim, a dog, lived twelve hours. The vessels of the dura mater were remarkably turgid, and all the sinuses much loaded with blood. In short, says Dr. Kellie, this brain was gorged with blood in all its minute vessels, and was in a very different state of vascularity to those bled to death." 2d. Let us take his experiments with hydrocyanic acid. He says, "the sinuses and veins were found loaded and congested, and the brain was every where turgid with blood. It was quite evident that the brain contained, beyond all dispute, a much larger quantity of red blood than the brains of animals bled to death."

He concludes that the other brains must have been depleted by bleeding.

These experiments teach us that the quantity of blood within the cranium is not unvarying, and, also, that though we can drain every vessel of the body, we are not able to drain those of the brain, but that we may drain them to a great extent.

It must seem strange to you, gentlemen, that these experiments should be so long referred to, to prove the assertions made by

Dr. Kellie, when we find that they prove the contrary to be the truth.

These quotations are no doubt drawn from his conclusions and not from his observations. For in one communication he asserts "that in the ordinary state of the parts we can not lessen, to any considerable extent, the quantity of blood within the cranium by bloodletting, whereas, if we trephine the skull, the hemorrhage will have very little blood in the brain."

Dr. Burrows exploded the theories of Dr. Kellie and others based upon the mechanical structure of the cranium, and proved beyond question the varying quantity of blood as shown in his experiments. A few of his experiments will be useful in clearing the subject from obscurity.

He killed two rabbits, one by bleeding, the other by strangulation. With the first, or the one dying from hemorrhage, while the blood was flowing the conjunctiva was observed to become pale, and the eye-balls to shrink within the head. Upon examination of the head of the rabbit the integument and muscles were found to be bloodless. The brain was found pale; the sinuses empty, and sections of brain substance appeared bloodless. On the second, or the one dying from strangulation, the conjunctiva became congested; the eye-balls turgid, prominent and projected even beyond their sockets. The integument and muscles of the head were found full of blood. Upon opening the cranium the vessels of the membrane, as well as the sinuses, were full of dark liquid blood. The whole brain substance appeared of a dark reddish hue as if stained with extravasated blood. In this you find evidence that a change of quantity can be effected by different actions. In one of these scarcely a trace of blood being found, in the other every vessel was full of blood. In all these observations there must be taken into consideration the injury done to the nervous system. How much these lesions affect the results no one can say.

Dr. Kellie asserts "that change of posture has no effect upon the quantity of blood in the cerebral vessels, and, also, though I am willing to admit that the general pressure of the circulating fluid may in this way be, under certain circumstances, increased or diminished, and the circulation through the head accelerated, retarded or disturbed."

To ascertain the effects of position upon the fluids in the brain, the total effect of gravitation, Dr. Kellie administered a dose of

hydrocyanic acid to two dogs. One he suspended by the ears, the other by the heels. They were taken down eighteen hours after this and examined. The effects of position were plainly marked, viz: With the dog suspended by the heels the integuments and their vessels were filled and congested to the greatest possible degree; the integuments of the one suspended by the ears, as well as the vessels of the head, were pale and empty. Within the head, says the doctor, the contrast was but trifling; the sinuses were loaded, beyond all doubt, in the one, and rather empty in the other. Dr. Burrows performed the same experiment and asserts that the contrast is most striking. In one case where position placed the head beneath the body, gravitation of blood produced a most intense congestion; while in a reverse condition a state of anemia resulted.

If the principles of hydraulics referred to applied no change, the quantity of blood would have resulted from force of gravity. Experiments show that gravity influences after death the fluids within the cranium, as well as other parts of the body. Gravity causes the blood to subside to the under side of the dead body. Dr. Tod says that in estimating the color of cerebral substance, allowance must be made for the position of the head of the corpse after death.

The brains of those dying from hanging are not found necessarily congested. Dr. Watson states, the integuments of the head and face, in an observation made, were turgid with blood, but that the brain did not appear to be unnaturally full of blood. Bichat's numerous observations of criminals executed gave the same results. The observations recorded by Esquirol, Brodie, Hooper, Cook and Portal, show that in some cases there was great congestion—in a few even extravasation of blood.

Dr. Carpenter says, that when death has resulted from compression round the neck so as to prevent respiration, the sinuses of the brain partake of the general venous congestion, and the brain exhibits an unusual number of red points when sliced. He says that the great variety of appearances results from the mode of applying the ligature to the neck. The hangman places the knot on one side, and leaves one side free from great pressure. The congestion in these cases, when produced, resembles that of apoplexy. One writer says the nearer the ligature is placed to the jaw, the less liable this apoplectic condition is to exist.

Observation has shown that in these cases of death produced

by hanging, the congestion caused by the pressure of the ligature during life, is not always found present after death, the blood gravitating through the deep seated veins of the neck. Hence the congestion would be but temporary.

One point to which we called your attention as being the basis of the theory of Dr. Kellie, the principles of hydraulics involved, deserves more careful consideration. One feature of this was overlooked by Dr. Kellie, that the cranium is not a perfect sphere, but that it is pierced by an innumerable number of foramina; also in the cranium of the child we find the fontanelle. I have also seen cases in which nearly all of a parietal bone, and with one man wounded at Pea Ridge, nearly all of both parietal bones were torn away by a shell. Atmospheric pressure is equal upon all parts of the body. If the circulation within the cranium is dependent upon atmospheric pressure, how can atmospheric pressure when applied direct to the membranes of the brain be tolerated? If the principles upon which this circulation depends are those "well known principles of hydraulics," by which a vacuum is filled by atmospheric pressure, then a perforation of this sphere, and interference with these principles must be followed by change of function. If the circulation is dependent upon a perfect bony covering, the brain must become bloodless when this covering is removed. In addition to the influence of atmospheric pressure, we have *vascular pressure within* the cranium. We have shown you by the experiments of the French Physiologists that the blood maintains by the heart's action and contractile power of the arterial walls, a pressure equal to 4 lbs. 6 oz., to the square inch. This force creates a certain degree of pressure, and is aided by reflux of venous blood in respiration.

The quantity of blood furnished to the brain is, like all parts of the body, indicated by the tension of the arterial walls—their activity. When from accident, or for observation, a portion of the skull is removed, you can observe the increase of tension and pressure upon the cerebral vessels at each systole of the heart. The cerebrum seems to expand, the substance seems to rise up, to more than fill the cavity of the cranium. This alternate rising and falling of cerebral substance, indicates that whatever distends the cerebral vessels makes pressure upon cerebral substance. There must be a force of distension equal to the tension of the arteries, for the movements of the brain correspond exactly to this pressure made by the blood upon the arteries. In addition

to the blood there is a fluid thrown out from it, which is contained within the ventricles. This extra vascular fluid is found in a quantity varying with arterial tension. In health it is probable that sufficient only is present to lubricate the surfaces. Some writers have assumed that there is a greater quantity present, and that when venous or arterial congestion takes place, there must be an expulsion of a part of this fluid. In spina bifida this fluid gravitates, and may be observed to correspond in its pressure to that of the fluids of the brain. When, on the other hand, the vascular tension is not sufficient to meet the demands of the brain, there is an increase of this serum thrown out. The deficiency of blood is thus compensated for.

Many have maintained that the brain substance is incompressible. There is increased size of the brain at times, though how much of this is due to pressure made by the vessels and serum, I am unable to say. You may remove the parietal bones in these cases, and you find that the brain rises higher than before; that you can scarcely get it back to its former size. Like a compressed sponge it expands when compression is removed. The ventricles and passages for vessels correspond to the pores of the sponge, and like the sponge the brain could be reduced in size at the expense of these pores, without actual compression of brain substance. It is elastic. It is, however, probable that like all tissues it may be compressed.

Of the modifications consistent with health little need be said, further than that some healthy physiological actions are dependent upon a change of quantity of blood within the cranium. Thus in sleep the brain is comparatively anemic. The fontanelle of the child is depressed. The membranes of the patient who has lost a portion of the bony covering of his head are paler, the vessels smaller. Anæsthetics produce like results. Experiments with chloroform have proved that it renders the brain anemic. Hence its use day after day renders the brain powerless from insufficient nourishment and vital force. In activity of the brain there is increased flow of blood. This determination of blood renders the brain more powerful. Hence, to increase this action, writers and speakers resort to cerebral stimulants—thought flows more freely. We discussed this fully while upon the subject of Accessory articles of Diet.

II.

Our second division discusses the modifications of disease. Those with which we will have to deal are simply anemia, or deficiency of blood and *hyperemia*, or excess of blood.

In health a slight diminution of the quantity of blood circulating in the brain produces no ill effects. The most prominent symptom or effect of diminished supply of blood to the brain, is *syncope*, or fainting. This may be the result of a *want of pressure* upon the arterial walls of the vessels, as occurs in cases of sudden fright or "shock." The slight tension of arterial walls fails to furnish pressure to the brain. That is in syncope there is so little force to the blood current that normal pressure is removed from the brain. It may occur in health, or from debility resulting from disease. This condition presents to the practitioner a wide field for study. It is not sufficient to be able to recognize debility, or to assert that your patient "has brain trouble." An anemic condition of the brain, attended with loss of power in the arterial walls, in the aged patient, you will find the most difficult trouble with which you have to contend in practice. Anemia of the brain may also be the result of action far distant from the brain. In disease many inexplicable phenomena arise from an anemic brain. Your anemic, debilitated, chlorotic girl faints, or goes off into a train of hysterics at the sight of a serpent. She may have chorea, neuralgia, or she may exhibit a variety of pathological conditions all dependent upon insufficient supply of blood. In many diseases your prognosis is based upon an application of these principles. You judge of the vital power, the recuperative force of your patient, from the circulation you are able to maintain in the brain.

We taught you, while upon the subject of Absorption, the relation existing between nutriment introduced into the stomach and the blood current. The necessity of power and sufficient density in the blood stream. From what does the train of symptoms indicative of functional disorder of the brain arise in the anemic patient? From want of pressure? From deteriorated blood? From change of quantity?

A mild case of anemia does not present signs of want of pressure on the brain. There is no evidence of any great deficiency of supply of blood to the brain. In cases of hypertrophy, or over growth of the brain, there is often almost complete bloodlessness—the blood is unable to make its way into the cerebral substance—

yet with this want of blood no signs of cerebral anemia are exhibited. No nervous symptoms that characterize anemia exist. You will be much more apt to conclude your patient suffers from an *excess* of blood. There is increased pressure from increased amount of brain substance. There is no vascular pressure of more note than in anemia; yet no symptoms of bloodlessness are exhibited. Hence diminished quantity of blood, unattended with diminished pressure, does not manifest symptoms so common to general anaemia.

There have been many experiments instituted to determine the effects of diminished quantity of blood in the brain. Prominent among these observers are Kussmaul and Tenner. They found that when both carotids were compressed in the human subject, the vertebral arteries, of course, not being interfered with, the phenomena were pallor of the face, loss of consciousness, dilatation of the pupils, slow, deep, sighing respiration; and in two cases of deficient mental vigor a choking sensation, followed by vomiting and convulsions. Ligature of one or both in succession of the common carotids, may be, or may not be, followed by convulsions and paralysis. When this occurs the paralysis affects the opposite side, the convulsions the same side. The paralysis may be observed before, during or after the convulsions. The eye on the side of the vessel frequently becomes blind. A train of nervous symptoms follows ligation of the arteries, varying in intensity, or closure from any cause may be attended with morbid manifestations. In fourteen cases reported by Dr. Chevers, and sixty-five by Longet, the closure of the carotids of either side was attended by faintness, giddiness, dizziness, loss of speech, delirium, insensibility. In a few days paralysis of the *opposite* side was observed. The symptoms are usually given as dizziness, stupor, insensibility, loss of consciousness, of speech, and of free play of the muscles in general; difficult deglutition, nausea, vomiting and coma. The *pathological anatomy* is generally a softening of the corresponding cerebral hemisphere.

These observers, with others, believe that "epileptic convulsions manifest themselves in man only, when, together with the cerebrum, some, or all of the parts of the encephalic mass lying behind the thalami optici, are suddenly deprived of blood to a sufficient amount; but that sudden falling down, announcing the approach of an apoplectic attack, unconsciousness and insensibility, originate in causes proceeding from the brain proper."

Read Rousseau's *Clinique* upon Appolectiform Cerebral Congestion, you will be forced to conclude with him that this condition is essentially anemic in its character, and you will conclude with Jones, Rousseau and his contemporaries, that there is no real appolectic condition in these cases at the stage of the attack, when Kussmaul and Tenner so designate it as such. You will have leisure when you return home, before you obtain business, to study these works. In these cases, in the onset, the face becomes pale, and it is only after an interval that it becomes flushed. In the observations of Kussmaul and Tenner, when they removed the ligature from the carotids, there was always a temporary hyperemia of the brain.

Is not this the condition which results in "flooding" after delivery? Your bloodless, pulseless patient soon exhibits intense cerebral excitement.

In abortion cases the patient will bleed, become pale and almost pulseless. It ceases; reaction ensues. Beware of cerebral excitement; she soon will bleed again. A flushed face does not indicate always a hyperemic brain. On the other hand, the face may be pale; the pupils of the eye dilated; the patient comatose; unconscious; pulse feeble; and yet the brain is overwhelmed. Your patient who succumbs to an *exhausting* disease, exhibits these symptoms, which can be frequently warded off by proper stimulation and nourishment. In these cases, when you observe pallor of the face, spasmotic contraction of muscles, dilated pupils, cold extremities from deficient circulation, your patient will probably soon become unconscious and die with convulsions—an anemic brain.

The nervous centres when deprived of nutrition, are rendered exciteable and weak. A muscle grows weak, and spasmotic contraction takes place, which is followed by paralysis when its nerve centre is deprived of blood. A person having a well nourished nervous system is calm, quiet, while with the reverse there is irritability, a want of energy, and a want of action in all the viscera.

With the aged person, or the young, when deprived of blood, the brain becomes shrunken; there is effusion of serum both interstitial and subarachnoid. The progress of softening from anemia is given by Buhl and by Panum as follows: "The part deprived of blood undergoes *red* softening, which lasts from eight to fourteen days. It then passes to the stage of yellow, which lasts several months, this being followed by white. There is then

old fatty degeneration and disintegration. This is generally the termination of chronic delirium tremens, epilepsy and diseases which destroy the vascular tone."

Our second division of cerebral circulation, when modified by disease, is *excess* of blood in the brain or hyperemia. This is an increase of arterial blood. We called your attention while speaking of the muscular coat of the vessels and their contractile power, to that condition resulting from a want of contractile power in the veins; the gravitation of blood into them constituting varicose veins, and the ill-nourished condition of such parts. *Venous congestion* is a pathological condition occurring more frequently as a termination or result of disease in the brain, from want of contractile power. We have referred to this as more a condition approaching that which characterizes anemia.

Cerebral congestion, or excess of blood, is common to the onset of malarial fevers, acute diseases attended with sthenic delirium, delirium tremens, mania, and follows excessive stimulation, and any depression of the vaso-motor nerves. Intestinal, or *peripheral* irritation of nerves may cause cerebral hyperemia, by what Brinton terms "reflex relaxation." Do not mistake this condition when observed with weak and sensitive persons for one requiring depletion or active medication. Poisons, burns, eruptive diseases, and all causes acting to produce depression of the sympathetic or vaso-motor paresis, will produce cerebral hyperemia.

When we discuss the functions of the sympathetic nerves, we will speak more fully of its influence upon the circulation. When this has been cut there is congestion of parts distant to which it has been in communication—the temperature rises. Hence in fevers and diseases, attended with loss of power in the sympathetic, the functions of organs is abolished in a ratio corresponding to the paresis. The nerves supplying voluntary muscular fibre, or excito-motor, when paralyzed, lessen the temperature. Many congestive troubles are due simply to want of tone in the vaso-motor system. Many so-called chronic inflammations of the uterus yield only to a "toning up" of the vaso-motor nerves. Do not forget this when you are advised to leech and scarify some enlarged uterus that is thus conditioned from deficient nerve force.

Congestion of the brain precedes a variety of lesions of the brain—one especially is of great importance—hemorrhage or apoplexy. This is the result of an outpouring of blood varying in

quantity from a few drops to ounces. Cerebral hemorrhage is not always accompanied by apoplexy. These symptoms show themselves only when there is considerable hemorrhage, (Trousseau). There may, however, be apoplexy without the pouring out of blood. One prominent feature of apoplexy is *coma*, which is a suspension of the functions of the brain, while those of the cord remain partially or wholly unimpaired—sensation, volition and consciousness are lost. This is supposed to be due to pressure. This may be caused by pressure without effusion, either of blood or serum, by congestion. It may be produced by highly carbonized blood, or deteriorated blood.

Our last division of the subject discusses the influence of the heart upon cerebral circulation. Bichat has maintained that the brain is dependent on the momentum of the blood in the vessels for its power, or in other words, increased circulation causes increased activity of the brain. He says, that men who have long necks have more limited faculties, than those with short necks. A short neck is indicative of active cerebral circulation and cerebral energy. The pressure upon the brain is frequently due to a diseased condition of the heart. It maintains too great a tension of the arterial walls, which ultimately yield to the pressure. I have observed coma to manifest itself in this condition. This was frequently the case with Dr. A. Brooke, a member of the State Medical Society, who died last year from cerebral congestion. Remedies which controlled the heart's action gave immediate relief.

In debility, in which cerebral anemia is a troublesome symptom, stimulation of the heart relieves a long train of nervous manifestation. Whatever exhausts or depresses the heart's action, aggravates the nervous derangement.

We trust you will be able to apply the principles taught in this lecture. Thus the effects of position. All are familiar with the fact that it is difficult to prevent yourself from falling asleep while when tired, if you maintain an upright position. The blood gravitates; the brain is anemic; you lie down and "nature's sweet restorer" vanishes.

Cases are not uncommon of persons who can sleep much better sitting bolstered up in a chair. There is always an excess of blood in the brain in sleeplessness. Exercise by sending blood to the muscles and organs relieves the brain, and this condition is removed. In the brains of old persons the vaso-motor nerves are

deficient in vigor. It is at times extremely difficult to give them sufficient vigor to produce natural sleep. They frequently resort to stimulants. Happily now we have more efficient agents. In mania there is always too much blood in the brain. Cold effusion was employed to subdue the patient, which accomplished its purpose by causing contraction of the vessels. Some are unable to sleep without a large pillow; others, unless the head is low.

Blood letting is now seldom practiced in cases of apoplexy, the patient doing better if the vascular tone is improved, and an upright position maintained. You can no more remove effused blood from the brain by blood letting, than you can from around the bruised surface of a contused wound. The effect of the recumbent position is manifest in those eminent writers who were able to write only while lying down. Attention should also be given to respiration. Whatever interferes with this, affects cerebral circulation.

The points to be summed up may be thus expressed.

1st. It has been asserted that the brain is encased in a bony sphere, the plenitude of which is maintained by atmospheric pressure. That loss of blood, or medicinal agents, do not affect the quantity within the cranium. *Experiments show that it can be rendered nearly bloodless.* (In 1866 I administered, one morning, chloroform to five dogs. To the first it was given rapidly. No air allowed. Death speedily resulted from asphyxia—suffocation. The brain and spinal cord was loaded with blood. Heart distended upon both sides. With the others it was administered with an abundance of air, slowly, till death was produced. The brains were pale and bloodless. The heart full of blood).

2d. It has been claimed that posture of the body does not affect the quantity of blood within the brain. Gravitation influences greatly the amount of blood within the cranium.

Hoping the gentlemen can make this subject practical, we announce as our next lecture a conclusion of our discussion of the circulation, after which we will take up the functions of the nervous system.

[Following the publication of this I will present in the *Lancet* and *Observer* an article upon *Cerebral Paresis*, with a report of a number of illustrative cases.]

ART. II.—*Constriction of Os-Uteri.*

BY C. D. PALMER, M. D., of Cincinnati.

Notwithstanding the wonderful progress that has been made in gynaecology, during the last quarter of a century, there have, also, been some things proposed, which are now practiced for the relief of suffering women, that are irrational, one-sided, and, in their influences, pernicious. It was the inventive genius of Sir J. Y. Simpson, who first performed excision for constriction of os and cervix uteri, occasionally mechanical dysmenorrhea and sterility. To-day incisions and sections of the uterus, with certain gynaecologists, have become of frequent occurrence; so frequent as to call forth the condemnation from more conservative, but none the less progressive, or skillful specialists. It is easy to see how men practicing in the department of diseases of women of strong surgical proclivities, too impatient to pursue a more mild and safe course, eager for prompt results, and having little faith in constitutional remedies, fall into the habit of almost invariably cutting every case coming under their supervision. The constricted os-uteri and cervical canal, all flexions, versions and interstitial fibroids, etc., with menstruation irregular and painful, get the same surgical treatment.

Says one, "The insufficient methods adopted for cure of uterine misplacements, induce us to seek elsewhere, than the realms of constitutionalism for treatment of success, etc." Says Sims, concerning dysmenorrhea, "The operation of enlarging the canal of the uterus by incision, is the only procedure from which I have derived the least benefit."

It has doubtless occurred to many, that these cases so operated upon and benefited, are but seldom allowed to slip the memory of the physician, or the notice of the profession, while the unsuccessful ones frequently go unnoticed, and finally fall into the hands of other practitioners.

A congenitally long cervix and constricted os-uteri, giving rise to dysmenorrhea and sterility, (a type of such is reported below), will not be benefited by constitutional treatment of any kind; that such a condition invariably yields to dilatation, no one will presume; that occasionally a few cases will present themselves with firm, hard, gristle-like condition of os, which will not be benefited by dilatation, but require incision by scissors, or metrotome, all will perhaps admit. What is claimed here only is, that cases of constriction of the os and cervix uteri, in which there is no

structural change of surrounding tissue, such as thickening, induration, etc., but simply having the natural softness of uterine tissue should first have the trial of systematic dilatation.

If *laminearia digitata* be used, Greenhalgh's is best, being perforated from one extremity to the other to permit a drain of secretions from the cavity of the uterus. This tent is better to commence with, for the constriction may have narrowed the mouth of the womb to such an extent, as to barely admit the smallest sized bougie. Certainly, to perform incision in such a case dilatation would be first necessitated. The long piece of sea-tangle can better be retained in position; the short cut pieces very easily slipping out. If sponge tents are used, they should be made to fit the case; not be longer than the cervical canal, and prepared with carbolic acid to render them inodorous, as recommended by Robert Ellis in *Obstetrical Transactions* of '68.

Dilatations have this in their favor, in that they are not followed by hemorrhage, and need not be by inflammation if properly used. Should there be any existing inflammatory action, such as endo-cervicitis, endo-metritis, etc., or if there has been at any time in the past a cellulitis, or pelvic peritonitis, they are not to be entertained. Tents should, perhaps, not be introduced oftener than once in two days, and even then, for only two or three times in succession; not retained longer than twelve hours; if they occasion much pain within the pelvis, it cautions us to proceed slower, or abstain from further procedure of this kind altogether. Perhaps the best time to be selected for dilatation is that following the menstrual nisus. The uterus is then softer, and yields to expanding agents more readily. Besides, if conception occur before the time selected for the next series of operations, probable evidence of it could be recognized by menstrual suppression beforehand.

It is true there is a strong tendency for a relapse of the old condition after dilatations; as much, however, can be said concerning incisions.

Instruments, termed uterine dilators, would probably be insufficient in this class of cases.

Tilt says, "If it be very difficult to introduce a No. 1 or No. 2 bougie into the cervix, instead of pottering with sponge tents, or any other tents, it is better to divide the structure. If a No. 3 or No. 4 bougie be tightly grasped, or comes away bearing the impression of contracting rings, I consider the case is one for

dilatation." It will be noticed in one of the cases reported below, that a No. 1 bougie passed with difficulty, yet sufficient openness of the os and cervical canal of uterus was permanently maintained to overcome the mechanical dysmenorrhea.

As to the most common seat of stricture, there is a variety of opinion among the best gynæcologists. Tilt thinks it to be the *os-internum*, while Barnes the *os-externum*. Dr. Rasch, of London Obstetrical Society, says, he never found a case of stricture of the internal os. Cases in which he failed to pass the sound, or probe, he believes to be those of flexion. Others have not been so successful.

The two following cases are presented as illustrative:

A married lady, about 25 years of age, presented the appearance and development of good health, and has enjoyed the same, except during her menstrual period, at which time she had suffered ever since the first accession of menses, from dysmenorrhea of a cramping nature, and, also, vesical tenesmus. Has been married the fifth year without conception. The patient applying for the relief of dysmenorrhea, and extremely anxious to become a mother. A careful examination of the pelvic organs revealed a very small uterus, measuring with probe, (bent to pass the uterine canal), one and a quarter inches; the fundus tipped forward on to the bladder, with os contracted to an orifice, barely large enough to admit a No. 1 bougie. The diagnosis was anteflexion of an undeveloped uterus. A condition of things easily explaining the symptoms of dysmenorrhea and sterility.

No medicine was administered internally, save a pill of Podophyllin Ext. Nux. Vomica and Belladonna, to regulate the bowels, which were habitually costive; but systematic dilatation with *laminaria* tents was instituted after each menstrual period for three months. First the No. 1 tent, (long), and last the No. 6. The first menstrual flow after dilatation was free from pain, and in an increased quantity. To maintain openness, however, the operations were twice repeated, as first stated. This was in the fall of 1856, and as the patient has been seen and questioned as to her condition frequently since, she states, she suffers no pain whatever in menstruating. The vesical tenesmus, which most probably was sympathetic with uterine, was relieved at same time. There has been no conception, nor will there be, is it likely, as the uterus is altogether too small.

The second was that of a young delicate lady, of about 22 years

of age. Been married the third year without conception; been dysmenorrhoeic since puberty. Menstruation is regular, scanty, attended with excessive uterine tortuosity and tenesmus. As she had taken a large variety of medicines, without any relief, her symptoms warranted a physical examination. The uterus was found retroverted; slightly retroflexed; fundus resting on the rectum; the os-externum contracted as in the preceding case; cervix elongated. The silver probe passed readily three inches, after introduction through the external os, so that there was no constriction of any other portion of uterine canal. Dilatations were made, as stated above, after two menstrual periods, resulting in a free and painless menstrual flow. Patient wishing to make a visit to her sister in Louisville, at this time, it was thought well to suspend further dilatation and await the result of what had been done. She was given a teaspoonful of Syrup of Pyrophosphate of Iron three times per day, to take during her visit. Remaining absent several weeks, and again menstruating without pain on return, no further action was taken, hoping that conception would soon follow. Fortunately for her, and very gratifying to her too, it did within a month, and she is now in the sixth month of pregnancy. After securing an openness of uterine canal, it may be stated, no support or local treatment was made for retroversion, as patient experienced no inconvenience therefrom, in locomotion or otherwise.

ART. III.—Report of a Case of Miscarriage at Three Months, with Retained Placenta.

BY RICHARD GRAY, JR., M. D., of KEENE, COSHOCOTON CO., OHIO.

Sunday morning, September 6th, at 7 o'clock, I was called to see a young married woman in this place, who, during the night, had had a miscarriage. Found the patient in bed exhausted and considerably excited. The foetus had been expelled about 4 A. M., but the placenta was still retained. I found the uterus firmly contracted, and, upon making an examination, found the vagina hot and dry; the cervix somewhat *elongated*; the os slightly dilated; no hemorrhage; pains entirely gone.

The case, up to my arrival, had been under the care of an "Uriscopian," who luxuriates in this vicinity, of teutonic persua-

sion and considerable breadth of beam. From his statement, and that of the friends, I learned that he had been summoned about 4 A. M., and found the placenta retained, when he began pulling away at the cord to wring it away by main strength, when, luckily for the woman, the cord broke, and Dutchy was "at the end of his string." A brilliant thought now entered his "noggin," he would include the placenta in a string, which would give him a good purchase. So, acting on the thought, he began tugging away, at what he took to be the placenta, like "a dog at a root," until he succeeded in pulling it almost into the world. The husband, who was by, was ordered to tie the string; but he, judging from his wife's outeries that all was not right, said he would go for help, when he came for me. Dutchy still held on to the string idea, and wanted me to tie it. I declined, and told him the woman had been worried enough; that I thought as there was no flooding and the uterus contracted, there could be nothing done, but wait the return of pain, and make the patient as comfortable as possible. He exclaimed, "Mein Got, de after birth will grow fast, and de woman will go dead." However, when he found I was decided, he took up his traps and left me in possession.

I then went to the woman and calmed her fears; told her all would come right in time, and left her with directions to call me on the first indication of flooding, as I only lived a few doors away. I saw the case several times during the next twenty-four hours, when I was again called, and found flooding had come on, and with it regular pains. Made an examination; found the os dilated; the placenta lying detached in the mouth of the womb, which I easily delivered, to my no little satisfaction, and that of the patient and her friends, since when she has done well.

ART. IV.—*Diphtheria.*

By M. H. HAYNES, M. D., Seven Mile, Ohio.

Since there has been so much said upon the subject of Diphtheria and the various forms of "sore throat" generally, I have thought that a short history of an epidemic which prevailed in this neighborhood, during the months of January, February and March, 1864, might not be devoid of interest, and would probably throw some light upon the subject under contemplation.

We shall aim, first, briefly to describe the disease; secondly, what we believe to have been the *immediate* cause, and, lastly, its extent, varieties, treatment, results, etc.

The disease was ushered in by a distinct chill, more or less severe; in some cases very light, and lasting but a short time; in others very severe, and continuing several hours, followed by slight febrile reaction, rarely severe, and in many cases scarcely perceptible. Often slight headache, not unfrequently absent entirely.

There was generally pain in the region of the stomach, frequently shooting or wandering pains through the chest, seldom, if ever, definitely located. There was universally, even in very mild cases, (and sometimes the only thing complained of), a painful soreness and rigidity of the muscles of the neck. In some cases there was occasional vomiting of a light glairy mucus, with usually no irregularity or disturbance of the bowels. Sometimes a slight hacking cough accompanied it, by no means constant, though frequently, when it did occur, quite troublesome, from a sensation of tickling in the throat. Breathing in some severe cases *very* difficult, inspiration being performed with a kind of spasmody effort, calling into action all the respiratory muscles, and almost lifting the patient from his seat, producing a loud crowing sound, and in such cases rendering decubitus intolerable. Deglutition frequently difficult, and sometimes painful. Sensation of surface painfully acute; the patient sometimes complaining of the slightest touch.

There was *always* a watery condition of the eyes, and this we regarded as pathognomonic, always being able to decide our cases at sight, and a further investigation invariably verifying the correctness of our diagnosis from this symptom alone.

Pulse slightly accelerated in some cases, in others normal; skin dry, and temperature somewhat increased in most cases. Tongue red, and covered with a thin whitish coat.

The entire surface of the throat, including the tonsils, soft palate, fauces, isthmus, pharynx and larynx, so far as examination could be made, presented a dark red shining appearance, characterized by a distinct line of demarkation, an entire absence of secretion, and a dryness and stiffness, which caused the walls of the throat to stand out, as it were, and rendering those organs almost useless in the acts of respiration and deglutition.

Auscultation and percussion revealed nothing abnormal. Under

the course of treatment pursued, this train of symptoms usually subsided in from four to six days, and the patient recovered, generally, rapidly. A free secretion of mucus in the throat, was the first sign of convalescence. I should have mentioned, that in a few cases erysipelas appeared externally about the head and face.

Cause.—The very great and sudden change which took place in the temperature of the weather on the evening of the 31st of December, 1863, and the extreme cold which followed for several days, we believe to have been the immediate cause of the epidemic. Nearly every case being traceable to direct exposure to the cold. Those most exposed being the first attacked, and suffering most from the disease. There appeared to be no evidence of contagion, although that opinion prevailed to an extent that was not at all desirable.

The disease first made its appearance in the family of Mr. P., on "Cotton Run." Mrs. P., a stout healthy woman, aged 25, suffered severely from cold while going from the railroad station to her home, one and a half miles, on that memorable first day of January, 1864; was violently attacked on the 17th of the same month. The rest of the family had it slightly afterward. About the same time Mr. B.'s young folks having been on a visit to the West, returned home during that cold weather. They were necessarily much exposed to the cold on their journey.

A Miss F., who had accompanied them, being ill when they arrived at B.'s on their return was unable to go further. An Eclectic being called, diagnosed "mumps;" a second being called, in a few days pronounced it "quinsy;" a third came to the rescue, and diagnosed "erysipelas," which was probably correct. Mr. B.'s eldest daughter was attacked January 22d; then followed one after another, until nine of the family suffered from the disease—most of them severely.

In two cases erysipelas appeared externally, extending over one side of face and scalp. (My friend, Dr. Falconer, of Hamilton, saw these cases with me.) From about this time the disease became general, and visited nearly every family; in fact, almost every individual was affected, more or less, by it; many of them so slight, however, as not to require any attention. Still the characteristic marks were visible in the throat, the watery, suffused condition of the eyes, etc.

After the first few weeks it was generally more mild; but it

continued to prevail until the 1st of April; and, while it continued, every disease seemed to partake of the nature of the epidemic, or, rather, it seemed to mould all other diseases into its own form.

During the prevalence of the epidemic the following cases occurred, which seem to me, under the circumstances, to be of peculiar interest:

January 30. Miss R., who had been greatly exposed to the extremes of heat and cold, while attending a protracted meeting, then in progress in the place, was attacked with the disease above described; but which, on the second day, assumed, in addition, all the symptoms of a severe case of Diphtheria. Swelling of the throat; exudation of false membrane; fetid breath, etc.; and on March 26th, Miss M. was attacked in same way from same cause, and disease assumed same character. Both were healthy young ladies, and both recovered.

On February 16th, Miss Mary W., after very great exposure to cold, was violently attacked with the disease. Had severe chill, continuing nearly all night, followed by urgent thirst; hot burning skin; pulse full and frequent. In addition to the ordinary symptoms, there was most intense pain in the back part of the head, shifting frequently to left shoulder or side, with delirium at times.

17th. Found her much the same, except that there was a reduction of temperature. Pulse small, frequent and feeble; and the skin was covered with rose colored spots of various dimensions. The eruption disappeared in about forty-eight hours; otherwise she continued about the same, until about the 24th, when the pain became located in the left hip. She improved slowly, but was unable to walk without the use of crutches for about three months. She finally recovered entirely.

On the 17th, the day after the above, Miss Mary J., aged 16, of good constitution and habit, was attacked in the same way, from same cause, and with equal severity. To all appearance the cases were identical. The eruption appeared on the second day. Symptoms became aggravated. She sank rapidly, and died on the 19th, forty-eight hours after the attack. In the first case we had good nursing; in the latter poor.

March 30. Mr. A. W., aged 54, of feeble habit, from exposure by standing on the ground the day before, until completely chilled, (the ground being frozen underneath, and thawed on top), was

attacked with the ordinary symptoms of the prevailing disease, though seemingly of mild character.

31st. Found him very comfortable. Sat up all day; read the news, and took his usual meals.

April 1st. Was summoned to see him early. Found him suffering intense pain in left side. It seemed of a most terrible character; almost bending him double, and causing him to cry out with pain at every breath. At the same time the appetite was good; tongue clean; pulse and temperature of surface normal. In short, there was nothing unusual, except the intense pain. It was at once diagnosed, pleurodynia, and treated accordingly; but every thing failed to bring the desired relief. Sinapisms, fomentations, morphia, chloroform, etc., were all used with, apparently, but little effect.

2d. But little change. The effects upon the general system were now becoming apparent. The skin became dusky; tongue brown; pulse small, frequent, and very feeble. There was dullness upon percussion over the entire left lung, and auscultation gave no sound of air entering it. (Dr. Falconer, of Hamilton, saw the patient this day with me).

He had no cough at any time. It is also worthy of remark, that the inflamed erysipelatous condition of the throat had disappeared. He sank rapidly; became comatose; and died April 4th, at 3 A. M.

Appearance after Death.—Rigor mortis well marked. Whole frame very rigid, immediately. Left leg covered with dark livid spots; some spots on other parts of the body.

Such are the facts, substantially; and now, to my mind, two important questions arise: 1st. What was the disease described? 2d. What relation had the particular cases noticed to the prevailing disease? We, (Dr. Falconer and myself), pronounced the disease erysipelatous in character. The first two cases described were evidently of the same kind as the rest, taking on diphtheritic action. The next two cases were clearly, to my mind, what is called "Spotted Fever;" yet they had all the characteristics of the prevailing disease; and the case of Mr. W., at the onset, was precisely like the rest; and may it not have been a case of metastasis from the throat to the lung? In the nature of things hepatization could not have taken place in so short a time, if we chose to call it pneumonia; neither does apoplexy of the lung give us any light independent of the prevailing epidemic.

The treatment was simply tonic. We usually began with a mild emetic, followed by a gentle cathartic. Swabbing the throat in severe cases, with a solution of nitrate silver. Tinct. ferri chloridi, sulph. quinia and chlor. potass., were freely used with nourishing diet; in a few cases stimulants, some simple application, was used upon the throat externally, such as a sack of hot dry salt, or hot fomentations, or poultices of hops; and where erysipelas appeared externally, tinct. iodine freely.

Results.—There were no fatal cases, except the two cases mentioned. Those severely attacked and vigorously treated recovered most rapidly.

Translations.

[From the German of PROF. LUDWIG TURK, of Vienna.—BY THOS. C. HENRY, M. D., (late U. S. A.), Cincinnati, Ohio.]

Primary Croup.—Pathological Anatomy of the Alteration of Voice.

The voice becomes husky and of the character known as croupy, owing to the stuffing of the larynx by phlegm and consequent impaction. According to Rokitansky's description, the disease shows itself early in the form of a thick clot in the throat, which the patient constantly strives to rid itself of. The thickness of the clot varies from the period of its commencement of formation, from one centime and over. Often the origin of its formation, is a red spotted surface, with a certain amount of extravasated blood. The membrane viscous is, to all intents, a serous, slime secreting membrane, or a sero-purulent loose, or entire, or in pieces, or with some suppuration and corrosion of surface. The pituitous tunicle appears under the exudation, inspissated and exhibits beside swelling and excoriation, denoting disturbed condition. Often does this small amount of extravasation of blood, seem to burrow under the submucous tissue, and infiltration ensue, sometimes uniformly, at other times circumscribed. The exudation gravitates down the trachea into the bronchi, inducing intense irritation, the tendency of which causes a strong effort at coughing. Complications with bronchial catarrh, lobular pneu-

monia of higher and lower grade, and emphysema of the lungs, are not uncommon.

Ætiology.

The croup prevails sporadically and epidemically; in isolated cases it exhibits a special proneness to contagious influence, producing highly inflammatory diphtheritic sore throat, often accompanied with a brown hue of the skin, and the well known peculiar cough, or sucking inspiration, or throttling.

(German *Sogenante*) engenders, says Troussseau, such inflammation equally severe, likewise, of this form with it, in the same epidemic, or in the same family, the highest degree of this form called Halsbraune (*half brown*) that is possible; and often, also, under the formation, broken up croup membrane in the mouth and in the nostrils, and excoriating the common coverings, fatally ending.

Symptoms and Course.

The essential appearance is from accumulated, numerous, repeated observations, exhibiting the modus-operandi, viz. The accumulated matter, by sucking downward, originates the croup membrane first, and the tonsils causing, swelling of the corresponding sub-maxillary glands of neck and other portions of the throat, and the tonsils and arch of the palate necrose. (Rokitansky and Bednar). The croupous exudation hastens to degeneration, a discolored, decaying, pulpose mass, and becomes, in such a case, carried on to a condition of gangrenose angina. When, after some days, the larynx is attacked, or when this fatality without the early formation of croup membrane in the throat occurs, one would observe that hoarseness is present, and becomes increasingly more apparent, deeper, barking cough, in the latter part of the course of the malady a sense of suffocation, and, for the most part, amounting to paroxysms, which paroxysms in the case of adults, generally by writers rarely alluded to. It gives beside such lasting impediments to the passage of the air through the larynx, or through the trachea, to recognize through the protraction, (with blowing sound), or by reason of the associated whistling sound with expiration it causes cyanosis and sleeplessness. Besides the croup membrane is inflated, and this is especially the case in small children, often alone, entire, a solitary sign of the presence of croup in the larynx.

By means of laryngoscopic examination, much may be learned in cases of older children and adults, in very young children sometimes it is true only as regards the epiglottis with the bare throat mirror alone. Only of late has any one detected albuminaria present in throat diseases of an acute order. So, also, in extreme cases of inflammatory croup is albuminaria observed, and it has but very recently proved that with even cases of croup of a mild character, the same is the fact, although the prognosis would seem to contra-indicate.

Duration of Disease and Origin.

The period of the duration of this affection varies much. According to Rilliet and Barthez, it is from six to nine days in duration. The fatal termination occurs from the narrowing of the air passages. The croup membrane, by reason of the catarrhal secretions, induce lobular pneumonia by the closing of the impacted ramifications of the bronchi.

With other diseases the croupy diphtheritic paralysis deserves special mention. It makes its appearance neither in cases of larynx and throat croup, for one has abundant occasion to make observations upon that topic. But a remarkable case can be found in the description of an epidemic of 1817, which was recorded by one Field, a French author, who first investigated and noticed it. The similarity fancied of the paralysis frequently alluded to of the course of throat croup, mostly in the first week of the commencing recovery, being a paralysis of the soft palate in the first place, the closure of the entrance of the nostrils is not quite perfect. Often I have observed it in an entire half paralysis of the soft palate. In such cases rhinoscopy under the nostrils through sinking of the soft palate in the hollow of the pharyngeal space was very easy of execution; and I could, during the lifting of one side of the soft palate, readily examine. The voice was nasal; the *noose*, (used in rhinoscopy in some cases), was troublesome; there was regurgitation of drink into the entrance of the nostrils, also, the examination was conducted with anaesthesia of the soft palate. Repeated steps were taken with no more paralysis *within*, although it is true that anaesthesia and formication occurred in an extremity, and more or less spreading spots on the body further removed, moving of or twitching of the paralyzed parts and extremities; and, in fact, there was feebleness of the other extremity, in walking or stepping, an intensely

severe attack would seize upon the other extremity. In particular I have observed limitation as to parts affected.

Such paralysis occurred, and of one extremity of two or three fingers, while the other extremity was left free. The art of healing a paralytic condition for a shorter or a longer time, which I have learned in my own observations, I found requires perseverance. The therapeutics are, to be observed together with a good support, and the employment of light tonic measures, viz: Iron, bark, also Nux Vomica, according to Rousseau. In one of my observations, in a case of want of power in the lower extremity, there was ordered a sprinkling or effusion of cold water. The treatment produced a beneficial result.

Prognosis

Depends upon the age of the child in a great measure. The natural constitution of the child, of course, has its bearing; but, as a general rule, a child under one year, whom croup has seldom, if ever, affected, succumbs to its onset at once. In a more advanced age, and especially by the second year of its life, when attacked, the disease will usually have a more favorable termination.

Therapeutics.

In general it is acknowledged, at this late day, that especially according to Rousseau's and Bretonneau's work, the importance of topical treatment is pre-eminent in throat croup, and for preventing the extension of diseases of the windpipe. It consists in the employment of remedial vapors and astringents. One never repeats remedial substances with concentrated causticity. For example: Van Sweeten, Rousseau, Chromsaure, Lewin, recommend Nit Argent—1 scruple, 2 drachms, in 13 distilled water, with Holland Stone or Sulph Copper in substances, or in the form of pulverization. The hard medical substance, viz: Lapis Infernalis in substance is so powerful, that my little practice has taught me that in special instances, some medicinal substances in croupose or diphteric inflammation of the air passages, cause a ruinous necrosis or an exudation is poured out of a corrosive character.

One must make repeated trials with the lapis in order to test its comparative strength and effects. For medicinal substances for the deeper parts of the throat and larynx, the hard and caustic medicines are very unsuitable. It is here to be recommended to employ very concentrated vapors of Holland Stone*—1 drachm Holland Stone to 3 drams distilled water, up to 13 of the latter, is recommended. Such medicine one has already heard of, the year that Green announced his mode of treatment, Schwamm having preceded him, and I must assent to Troussseau's experience, of which thereof he made a note; that then Schwamm supporting Fishbein-stab in his views—the viscosity is very thick in the case of children in whom there has been a repetition of throat disease, and a contraction of the pharyngeal muscles to overcome. By the employment of medical agents in the throat and in the larynx, have I, with advantage of my Schwamm's holder, by means of medical applications in the larynx, also, made to serve my Schwamm's prize, (*a porte caustique*.)

One must, by all such medical agents, endeavor through repeated applications, and then by cauterizing the sides of the croup membrane as much as is possible to remove it. By the use of medical applications in the throat, have we frequently my Tongue Spatula, (see pp. 104), for pressing down the tongue deeply, by another person waiting on me with the throat mirror; with that, also, one of Diffenbach invented, by which the first two phalanges of the left fore fingers for a guard against the teeth in a covered metal pipe were protected, which let free the third phalanx free.

With the point of the latter one can take hold and raise up the epiglottis, and back of the finger following Schwamm in bringing the larynx inward. With adults this mode of operating is suitable to the purpose, second, only, to caustic with cold water, so that a couple of mouthfulls be taken. By following the above directions, the pain will be much lessened. By the employment of caustic to the throat, when it is not too late, and in the way directed, the advantage will be obvious; and it is important that a judicious selection of the kind of caustic employed should be made. Still caustic is not to be used in all cases of throat croup, more especially when disease of the larynx is far advanced. This one can not always determine certainly, though, as a general thing, caustic applied to the inflamed membrane is advantageous. When the interior of the larynx is covered thickly, and

*Nit. Silver or Lapis Infernale.

low down with croup membrane, then it is uncertain that the caustic can take hold, indeed, rarely that it succeeds.

Among astringents, alum and tannin, mentioned by Arteus, used in the form of a finely levigated powder, and blown into the throat, is well worth mention.

In this advanced age, one makes use of medicinal substances in the form of vapor, or in the form of spray, using the pulverasiteu. Barthet gives a solution of 5 to 10 per cent., eight up to twenty times an hour, with De Sales Giron's inhaling apparatus, continuing the inhalation each time for fifteen to twenty minutes through the day. In the same way Weise directs Fieber and Widerhoffer, under late management officiating in St. Ann's Hospital for children, in cases where the lungs are free from disease. There it stands on Fieber's report one-third saved. Lewin advocates chlor. potass. and alum in practice in lingering cases. Besides this, with a selection of one of Siegel's Dampfhydrok. nions, he consumes from two to three hourly a solution of chlor. potash. one to one and one half ounces of potash, to one and one half to three ounces water, or alum five to ten grains, water one ounce.

Lastly. There was Siegel and Bierman in a case where a steam bath was employed; and in extreme cases—every case of extremity finely powdered lime in water—thirty parts lime—to one hundred water used with great benefit. Of topical blood letting in this enlightened age, one is the more prone to disapprove of it; and the Baron Von Troussseau violently opposed its employment, also the use of a mercurial with it. More advantage is to be found in enemas, and in a few cases cold—cold aspersion with water—lastly, tracheotomy.

Trousseau says of tracheotomy: Was tried in two hundred occasions from the commencement of an epipemic in hospital. In private practice Trousseau speaks more favorably of its comparative success on account of the operation being generally performed when the sufferer is too far gone.

In the hospital cases, above alluded to, were mostly unfavorable termination; about a fourth part were served. In St. Ann's Hospital for children, the operation met with a success on a part with the former statement—one-fourth.

With children less than a year old, there is doubtful advantage in tracheotomy. The earlier the operation can be performed, after the first violent signs of suffocation appear, the better; and where cases appear, in which the trachea and a large portion of the

bronchi are covered over in their minute ramifications, the fine air vessels of the lungs are implicated, and death is the result.

During the time of treatment of cases with the above affection, it is requisite to keep the patient duly nourished.

[Selections from the *Annuaire de Therapeutique*, for 1808.]

Translated BY GEO. E. WALTON, M. D.

Sulphate of Soda, for Removal of Spots on the Cornea.—(De Luca.)

It occurred to me that the sulphate of soda, which has the property of maintaining the fibrin of the blood in solution, might act favorably upon the eye, by causing spots upon the cornea to disappear.

Accordingly, I employed the sulphate of soda in very fine powder. The head of the patient is placed almost horizontally, and then a small quantity of the powder is let fall upon the globe of the eye. The powder is dissolved by the liquids of the eye. The results obtained by this method are satisfactory, for after a few days treatment, the spots commence to disappear. After the usage of this powder, in this manner twice a day, patients that could not see at all before, are able, not only to distinguish light, but to perceive movements.

Patients submitted to this treatment feel a very agreeable, cool sensation when the powder is dissolving in the eye.

Nitrate of Potassa in Mentagra.—(P. Stewart.)

The nitrate of potassa has been successful in all the cases of sycosis menti that I have lately treated. The action of this agent is more rapid and more certain than any other that I have seen used. In a few days I have cured serious cases that have resisted other treatment for some weeks. I use a saturated aqueous solution of the salt, with which the pustules are thoroughly moistened three or four times a day. If the solution causes much smarting, it should be diluted until the patient can tolerate it. A concentrated solution of chlorate of potassa can be employed with equal success.

Rubefacient and Anodyne Liniment.—(Mayet.)

The English liniment, which has been brought so much in vogue by M. le due de Morny, reddens the skin in a few minutes

and readily calms neuralgic pain. It has been analyzed by M. Mayet, who finds it composed as follows:

R.—Liquor Ammonia—25 degrees, $\frac{3}{5}$ iss,
Chloroform, $\frac{3}{5}$ i,
Camphor, $\frac{3}{5}$ iss,
Tr. Opium, $\frac{3}{5}$ ss,
Alcohol—90 degrees, $\frac{3}{5}$ iii, and $\frac{3}{5}$ vi.—M.

A piece of flannel is moistened with this liquid, and applied to the part of the body where it is desired to produce revulsion.

Ether Spray in Epilation.

This is a simple application of Richardson's invention, that certainly must be very satisfactory to patients who must undergo this painful operation. Says M. Horand: "By the aid of local anaesthesia we have been able to perform epilation without pain on patients afflicted with favus, sycosis and impetigo."

Ether Spray on the Vertebral Column in Chorea.

A little child of 7 years, pupil of the Orphanage of l'Enfant Jesus, entered the hospital, because of a very marked chorea, which showed itself for the second time in two years. After having employed all means, tonic and antispasmodic, M. Lubelski anaesthetized the spinal column by means of a current of sulphuric ether spray projected by the apparatus used by dentists, the two points being placed on either side of the column. After two affusions of three to five minutes each, the disordered movements lessened, and soon assumed their normal character.

Bichromate of Potassa in Syphilis.—(Dolbeau.)

Several observers have praised the bichromate of potassa in syphilis. Here are the facts that M. Dolbeau adds to the therapeutics of this agent:

"In 1865, says he, when I was Surgeon of the Lourcine Hospital, I had under my charge two wards. In the first, all the women were treated by the bichromate of potassa, *intus et extra*. In the second, the liquor of Van Swieten was given. All the syphilitics were equally freed from their symptoms, perhaps, those who took the bichromate of potassa, recovered a little more slowly.

"When the Lourcine patients go out of the hospital, and are

attacked by new symptoms, it is very rarely, indeed, that they do not again present themselves at the hospital for treatment. We can, therefore, with some confidence consult the hospital register to determine approximatively the number of relapses.

"One hundred and thirty-one patients were treated in my service during the year 1865. Of this number, eighty were subjected to mercurial treatment, and of these, forty-four have since been readmitted for treatment. Forty-four relapses in eighty is a little more than half. Fifty-one were treated with the bichromate of potassa, and of this number thirty have returned.

"To well appreciate these facts, it would be necessary to take into account the duration of treatment, which is extremely variable according to the case. I give the figures as I have collected them.

"Do not think my conclusions are favorable to the employment of the bichromate of potassa. No. I still rest in doubt. But this I will affirm, that the employment of this medication has been without inconvenience; that it has not prevented the disappearance of the symptoms; and that its trial can be recommended.

"I terminate by placing the question in this form:

"1st. Either the bichromate of potassa is an anti-syphilitic, or it is without action in syphilis.

"2d. If the bichromate of potassa is an anti-syphilitic, it is preferable to mercury, which has multiple inconveniences; but, if the bichromate of potassa is without action in syphilis, we are forced to the conclusion that this disease, left to itself, follows a course of evolution, and gets well spontaneously, without the intervention of mercurial preparations."

Of the Employment of Sulphites and Hyposulphites.—(J. Polli, of Milan.)

These salts, since the investigations of M. Polli, have been employed:

1st. In dressing ill-conditioned wounds, ichorous, gangrenous and phagedenic, in which cases they purify the surface, and facilitate cicatrization.

2d. In eruptive fevers as, Rubeola, Scarlatina, Variola, Erysipelas, they simplify the course, and prevent untoward sequelæ.

3d. In marsh, intermittent, or paludal fevers.

4th. In epidemic or contagious typhoid fevers.

5th. In fevers due to purulent or putrid absorption, (nosocomial, puerperal, and from dissection wounds).

6th. In veterinary medicine as in carbuncles and typhoid fevers of horned animals, and in the glanders of horses.

The treatment consists in giving, during the twenty-four hours, three or four drachms of the sulphite of magnesia in divided doses of about two scruples each; or give four or five drachms of the sulphite of soda in twenty-four hours in divided doses, in solution with syrup, or in enemas. The hyposulphite of magnesia and soda, and especially the latter, are somewhat cathartic. They act only as anti-fermentatives when they are transformed in the circulation into sulphites and bisulphites. Thus the hyposulphites are only secondary in antizymotic treatment, and it is only when given in small doses and for a long time continued, that they act with efficacy, as do the sulphites.

Burin du Buisson's Ferro-Manganic Preparations approved by the Paris Imperial Academy.

(Extract from the Vienna Medizinische Wochenschrift, No. 88, Oct. 16, 1867.)

The Ferro Manganic Preparations, and their introduction into therapeutics, are the consequence of numerous physiological and pathological observations.

The fact, that iron is one of the normal elements of the blood, has been universally admitted since the demonstrations of Menghim, Took and Laibach.

Now as Scheele's and Gahn's discoveries, in 1774, showed, that manganese is invariably associated with iron in organic nature, a suspicion arose that it existed also in organisms containing iron, and it was subsequently found not only in a multitude of plants, but also in the blood, flesh, milk, etc., as a constant accompaniment of iron.

Fourcroy and Vauquelin had already discovered manganese in bone ashes, afterward, in 1830, Wurzer found it in calcined blood; Millon in 1847, Marchesan in 1848, and, lastly, Hanon in 1849, formally declared, after further diligent research, that manganese is the constant and natural associate of iron in the blood.

Finally, Burin du Buisson, acting on the suggestion of Dr. Petrequin, undertook to verify these researches, and acquired

the certitude not only of the simultaneous presence of manganese with iron in the blood, but also found it even in healthy pus. Such facts could not fail to lead to the inference that, as morbid elements are produced by the absence or deficiency of iron in the blood, the same effect must likewise occur with regard to manganese, and, consequently, that whenever the exhibition of iron alone failed to cure chlorosis, the sole cause was that these chalybeates could not supply the economy with the manganese, which was wanting. Repeated experiments soon confirmed the truth of these conclusions. Numerous analyses of the blood demonstrated that the diminution of the proportion of iron in the blood of chlorotic patients was in constant ratio with the diminution of manganese, and many obstinate cases of chlorosis, which had resisted all treatment with chalybeates, were completely cured by the ferro-manganic preparations.

These facts led Dr. Hanon to the singular theory, which consisted in distinguishing two kinds of chlorosis, one arising from a deficiency of iron, the other from a deficiency of manganese. But as Dr. Hanon was unable to give a diagnosis of the difference between these two kinds of chlorosis, we can not but regard as empirical his method of administering manganese by itself in cases for which iron alone had produced no result.

Chemical experiments having demonstrated, as above stated, that manganese exists in the blood simultaneously with iron, and in clearly determined proportions, the absence of one being always attended with a proportional decrease of the other. This fact supplied a most reasonable motive for the simultaneous use of manganese and iron for all cases in which the exhibition of the latter alone was inefficient.

The subsequent experiments of Dr. Petrequin, and, after him, of Drs. Gensoul, Gubion, Contagne, Bonnarie, Delorme, and many more, perfectly justified this theory, and we can assert, without fear of error, that it is not only rational, but indispensable in many cases, to prescribe the ferro-manganic preparations instead of the single chalybeates hitherto employed.

Aware of the various requirements of the true practitioner, Mr. Burin du Buisson has endeavored to supply the ferro-manganic preparations in the most various and most appropriate forms, without making any mystery of his processes, which he has communicated to the scientific world by publishing an account of his labors.

We will here briefly recapitulate the names of Mr. Burin du Buisson's different preparations, which meet the most diversified demands of therapeutics, and are equally easy and agreeable to take. They are :

1. An Effervescent Ferro-Manganic Powder.
2. Carbonate of Iron and Manganese Pills.
3. Lactate of Iron and Manganese Lozenges.
4. Lactate of Manganese and Iron Syrup.
5. Iodide of Iron and Manganese Syrup.
6. Iodide of Iron and Manganese Pills.
7. Manganic Iron reduced by hydrogen.

All these medicines are used in cases for which iron and iodide of iron were formerly employed alone. Thus, according to Dr. Petrequin, in all cases of chlorosis occurring in young females at the age of puberty, as also in women who have reached the critical period, in passive hemorrhages, in certain cases of cachexia resulting from long intermittent fevers; morbid appearances in the heart and lungs, palpitations accompanied with giddiness, and dyspnæa, with obstinate cough, and disease of the lungs, yield to the excellent effects of the ferro-manganic preparations, aided by sedatives, such as foxglove, cherry-laurel water, morphine, belladonna, and far more speedily than by the use of those remedies alone.

In all cases the ferro-manganic preparations are unequalled for rapidity of effect and permanence of cure—results so rarely secured by simple chalybeates.

Dr. Petrequin always begins his treatment with the effervescent ferro-manganic powder, and at the same time prescribes two of the pills daily, these last being subsequently replaced by the lozenges, in order to avoid fatiguing the digestive organs. The ferro-manganic syrup generally completes the treatment.

All these medicines are administered at such times of the day as are most favorable for their digestion and assimilation. For instance, the pills and lozenges before meals, one before each. The ferro-manganic powder is best taken in a little wine; the syrup before breakfast, in doses of one or two tablespoonfuls.

Correspondence.

LETTER FROM PROF. W. H. TAYLOR.

BERLIN, September, 1868.

EDITOR LANCET AND OBSERVER. The various establishments here pertaining to medical science, and the care of the sick, are of the most extensive and complete character.

The Anatomical School, the splendid Laboratory, the Lying-in Institute, the Library, the Pathological Institute, (Virchow's department,) and the various divisions of the Charite, would each afford sufficient material for a letter.

In passing through the Male Surgical Department of the Hospital, a few days since, I noticed some points which may be of interest to you.

It is isolated from all others, and is surrounded by a large park to which the patients have free access. There are four buildings, connected by open corridors. One of the houses contains several wards, in which, as is commonly the case in the older institutions here but little attention has been paid to ventilation; the other buildings are of more recent construction, one of them bearing a close resemblance in external appearance and internal arrangement to our Pavilion Military Hospital; it contains one large, light, well-ventilated ward, and small room for special cases; but perfection of ventilation is obtained in the other two, which are simply large covered verandas, the floors of which are about six feet from the ground, the space beneath being open; the sides are of heavy canvas, in sections, which can be drawn up to any required height.

Scattered about the park are tents in which cases demanding isolation are placed, e. g., in one was a case of gangrene, in another an offensive bubo, in a third, two cases of *morbus coxae*.

In many points, treatment is of the same character as at home, beer and bouillon are frequently ordered. Our omnipotent, or rather, ubiquitous carbolic acid, has not yet obtained favorable consideration here. Charcoal, Permanganate of Potassa, and the preparations of Chlorine, are used as disinfectants for wounds

Conservative surgery seems dominant, for of the two hundred and thirty patients but one had been subjected to amputation, and a number of cases of partially severed fingers, involving fractures, were being treated with hope of union, while several cases of malignant disease were receiving only palliative treatment.

The wards were especially rich in fractures of the long bones, of every variety—simple, compound and comminuted. The treatment for *all* is the plaster paris splint, with the limb extended, an opening being made at the site of wound in compound cases. Great as was my surprise at this uniformity of treatment, it was increased when I learned that the dressing is applied immediately after the injury, a plan introduced by Prof. Langenbeck of this city, of course doing away with all other means of co-apтation and extension. Of the success of this method I was unable to judge from *results*, as all the patients were still wearing the splint. I was, however, favorably impressed with it in three cases of fracture of the femur (such as we would probably use it in), the patient having a much greater liberty of movement than in any other dressing, and proportionately greater degree of comfort during their confinement.

The plaster is applied as we are in the habit of doing, the bandage being of flannel, or more commonly of (I send you a specimen, the ladies can tell you the name), which is cheaper here than muslin; after the bandage is applied a very thick layer of plaster is spread over it, thus making a firm, closely-fitting case for the limb. In a case of fracture at the neck of the humerus Dessault's dressing was applied and retained in *situ* by a layer of plaster enveloping the injured arm and entire chest. This dressing is evidently the "mode" here, as even contused fractured fingers were done up with it. Of its value in all cases, and of the propriety of its immediate application, I have serious doubts.

We were shown the method of using an apparatus for securing accurate extension while applying the dressing to fractures of the lower extremity. The instrument consists of a heavy iron rod carrying at right-angles a movable iron seat, the patient is placed on a bed formed of three firm cushions, upon the middle one of which the pelvis rests. When ready for dressing the middle cushion is removed, one end of the rod is secured to the bottom of the bedstead, the rod passing perpendicularly between the

thighs and pressing firmly against the perineum, the seat is adjusted to support the nates and sacrum, and the pelvis thus being fixed, extension can be made without fear of its "tilting."

Everywhere were the evidences of scrupulous care in the management of the institution, the beds, floors and clothing of the patients were clean, the nurses sufficiently numerous and dexterous, and the patients all looked contented.

I was pleased with their simple but very efficient apparatus for washing wounds. It is the nasal douche we use, being a tin vessel with tube and stopcock at the bottom, to which an India rubber tube with ivory point is attached. The nurse carries the vessel and regulates the force of the stream by its elevation. Such an appliance is more convenient, and certainly less painful than the sponge. Vessels adapted in size and shape to the part to be cleansed are at hand to receive the discharges, thus for a wound in the axilla a basin fitting around the side of the chest was used, and for the leg a large, shallow vessel not unlike a tea-tray.

W. H. T.

LETTER FROM DR. WHITTAKER.

PRAGUE, September 8th, 1868.

EDITOR LANCET AND OBSERVER: Proud as we are, and justly, of the many advantages and immunities of our own beloved form of government, it would yet imply a prejudice the most profound, to fail to observe the peculiar opportunities vouchsafed to science by a rigid, if impartial, monarchy. Schemes and measures, which with us require a system of chicanery among political demagogues, are here at once effected by the fiat of power. The broad mantle of liberty at home forms the sadly misused cloak for so many pretenders. The marked contrast exhibited in the founding of the large and commodious new Lying-in Hospital, of Prague, and the long and weary efforts of our Board of Trustees to secure the necessary co-operation of the State Legislature for the erection of the new Commercial Hospital of Cincinnati, has induced the above homily. The same is true of similar institutions throughout Europe, though the suggestion, or incentive, in Catholic countries as this, is usually furnished by the church. The present building, which has for some time proved inadequate to

the increasing demand, forms a long row of two-story plain yellow buildings on the summit of a hill just at the edge of, and overlooking the city. An old church of gray stone, whose erection extends further into time than the memory of man, forms the upper angle, while below, the receding ground affords an additional story for the culinary department. Broad long halls, spacious, well-lighted and well-ventilated wards, absolute cleanliness throughout, lend at once a cheerful and favorable impression, and reflect creditably on its executive department. Accommodations are offered for about one hundred and twenty-five patients, the private or secret apartments inclusive, which latter are for the reception of unfortunate frail of the better class, and is made remunerative to the institution. The "getting up" period occupies eight days. the week bed,^a so called, when a transfer is made to the Foundling Hospital, where the children are left, or not, as optional.

The delivery room, itself, contains six couches, whose bedding is composed of a straw mattress, whose contents are changed after each birth, with three cushions of hair so arranged that the cushions at the foot can be superposed upon the center one, thus conveniently elevating the hips for operative procedure.

Immediately after the morning obstetrical lecture, a patient is placed on each bed for examination by touch during pregnancy. Perhaps there is nothing in obstetrics more striking to the observer than the perfection which is attained in the external examination. In almost every case the position is ascertained with considerable accuracy. The fingers of both hands are pressed with considerable force above the pelvis, so as to receive the head between them, then a series of rather rough palpations, with the fingers of each hand, alternately, in quick succession, are made over the abdomen, to ascertain the position of the so-called "small parts," when an auscultation, which is not always necessary, confirms the result. In every one of the breech cases present, the diagnosis was so established, and it is really astonishing how readily a little practice renders it a matter of easy acquirement. Easily executed as it is without exposure, and attended with so little inconvenience, it is a matter of wonder that it is not rendered more available by ours, the most practical of all people.

During the entire process of birth the auscultation of the foetal heart is assiduously applied, and on intimation of impairment of

power the birth is hastened; the exceeding rarity of still-born infants may be due to this case.

In breech presentations the delivery is always performed by extraction as soon as the cord is likely to be affected. Nothing is, of course, attempted until full dilatation of the os; then after delivery of the hips, these are seized in both hands, and a series of lever-like movements with extracting force is applied, until the shoulders appear; if necessary, the sacral arm is detached, then the body turned in the proper direction so as to make the other or pubic arm sacral, which is likewise delivered, and the head is engaged at the inferior strait. If now any delay occurs in its rapid expulsion, it is thus accelerated. The hand is passed between the posterior perineum, and the head and the face directed squarely into the hollow of the sacrum, after which the fingers of the right hand are placed fork-like over the back of the neck and shoulders, the palm of the hand resting on the back of the child, the left hand grasping the feet, and a firm forcible traction downward toward the perineum and outward is made, bringing the occipital protuberance fairly under the symphysis, when the body elevated by the left hand over the body of the mother, develops the face gradually, but quickly from the perineum, and the birth is accomplished. This is the Prager Handgriff so-called in contradistinction to the grasp of Smellie in execution with us, where the fingers of the right hand are placed in the canine fosse, and the chin approximated closely to the breast or that of veit, in which, in addition, the index and middle fingers of the left hand are applied against the occiput and forcibly extended. The danger of separating the head, or injuring the spinal cord, is, according to teaching, here purely theoretical, as the moderate force requisite is insufficient thereto; besides, on experiment, it was found necessary to append a weight of two hundred and fifty pounds to the head to cause its disjunction, an equivalent of a power which is entirely unnecessary. It has ever been the plan in adoption here. In the four cases which have already occurred during this session, the maneuvre has been safely and easily affected, and with good result.

The exquisite support of the perineum by the hands of the trained midwives almost always prevents a rupture. They claim to be able to foretell those cases in which such an accident is inevitable by the feel, and then it is anticipated by a tolerably free incision in the side of the distended perineum, which is, immedi-

ately after birth, united by silver suture. In the three cases in which the incision has been so made, the result was also good. Another cause of the infrequency of perineal rupture, is the manner of treatment, just at the moment of passage, "Durchschneiden," as the technical phrase runs; the mother is ordered to desist from all effort; the perineum and foetal head are thoroughly dried to protract its passage; the head is pushed down against the perineum, against the opposing hand, and then the scalp is carefully and cautiously drawn up from below, and thus the head is developed line by line, as is the favorite expression, until the parietal protuberances pass, and the elastic perineum glides back over the face, born, as it were, between two pains. The birth of the shoulders is similarly managed; first a downward force gentle but firm, then an elevation of the head, and gradual delivery of the sacral shoulder. Of course, such a system is only practicable where exposure is complete, hence it is not likely to prove of much benefit at home. In cases of foetal asphyxia the child is laid on the back after detachment, and cold water dashed on the chest and abdomen with brisk friction over the anterior surface, accompanied with a natal flagellation, which in severity approximates in degree that which, in later years, form such a powerful stimulus to industry or virtue. Should this prove insufficient the body is placed in a hot bath, and ice water poured on the head. In the single case in which this proved unsuccessful, the body enveloped in a blanket was laid on a concave tin vessel, whose interior was filled with hot water, and permitted so to remain all night. In this instance this was alike futile.

Craniotomy is performed with a long trephine, differing, except in its length, in no respect from the ordinary brain instrument. In our course on operative obstetrics, we had occasion to apply the instrument on a dead child in the phantom, and were charmed at the ease of its execution. The cephalotribe in use is Seyfert's own, and is an improvement on all preceding German instruments; but still as compared with Hodge's light and elegant compressor crani, an unwieldy instrument. The forceps is a slight modification of Nægeles.

The number of cases of contracted pelvis is indeed surprising, considering the large powerful frames of these women of the Slavonic tribe, whose avocations are of the rudest character, even to carrying the hod. Perhaps it is due, however, to this very fact, extending through many generations, the adaptability

is finally accomplished; the bones become firmer; the chest broader and fuller; and the pelvis deeper and narrower, more of the masculine type. The treatment in such cases is expectant, after ascertaining the exact character of the deformity, awaiting configuration of the head, some remarkable cases of which in paper imitation are displayed. If in reason of absolute or relative incompatibility, the birth is impossible, resort is had to craniotomy and cephalotripsy, or the Cæsarian section, as the individual case may demand, making, also, in this connection, a difference which appears rational between a simply living child, and one capable of life, meaning by the latter a child which has not been so injured, either by pressure, or operative procedure, as to implicate its life after birth. Where the character of the deformity is previously known, premature labor is induced in time for favorable results. The method being Kirwisch's, or the injection of warm water into the vagina; the effect being ascribed, not to the contraction due to reflex action induced by the heat, but to the simple mechanical extension of the vaginal walls to its utmost limits, and consequent involvement of the cervix, as can be verified by the introduction of the finger during the injection, when it will be ascertained that the vagina is everywhere in contact with the pelvic walls. A simple can, of a quart capacity, held above the patient, lying over a proper receptacle, and a rubber tube with convenient nozzle, are all that is necessary. From one to half a dozen injections effect the result. Should the indicatis vitalis render the accouchement imperative during the first three months, the sound is introduced in the utero, and gently turned toward each angle before withdrawal. The external pelvic measurements, in which the most confidence is placed, are the bitrochanteric which should amount to eleven inches, and the circumference from the sacro-vertebral junction, ant. sup. spin. process, and the symphysis a tape line around these points should give thirty-four inches in the normal pelvis.

The library of the Prague School is peculiarly rich, occupying, as it has throughout all time, a prominent place among obstetrical schools; it embraces in its collection of literature on this department all that has been written by cis-atlantic authors, and the lectures of the professors are rendered of particular historical interest by the display of quaint old volumes with curious titles and odd illustrations. "The Midwives Book" by Roslin, of Worms, the first printed work on obstetrics, 1513; "a beautiful

and sprightly little book of consolation, concerning the origin and birth of men, and the many and complicated accidents connected therewith," by Jacob Rueff, stone cutter and physician at Zurich, 1545; "The Female Garden of Roses," by Ryft, of Frankfort, 1615; compilations from the more ancient Greek, Latin and Arabic authors, with the English and French literature of a more recent date. With a genuine Chinese exclusiveness the literature of America is not represented. When we consider that our sewing machines form part of the furniture of every house in Germany; that Napoleon purchased the American locomotive that secured the first prize in the late World's Exposition; that Steinway's grand piano carried the premium over all the instruments furnished by this center of poesy and song; that it is due to her that two distant worlds are indissolubly linked into one by the electric telegraph, an invention of her own; more, that American ideas have already infused their leavening ideas of liberty into the spirit of every constitutional power of Europe; that in medicine, herself, her contributions have been as rich and valuable as from any other quarter of the globe. We may fain rest content to bide our time when her medicine shall force itself into the world's recognition. Whenever the time may arrive, if science with us keeps pace with art, that the old world may sit for instruction at the feet of the new, even as she is compelled to do in every other field of progress to-day. For the boy is father to the man.

W.

Large Infants.

AKRON, September 30th, 1868.

EDITOR LANCET AND OBSERVER: I see by the last *Lancet and Observer*, Dr. Gruwill reports the birth of a dead child weighing eighteen pounds, and asks what is the heaviest on record. On the 18th of August, 1864, I was present at the delivery of Mrs. Margaret Irvin, of this town, of a healthy male child which weighed nineteen and a half pounds. The child is still living and remarkably large of its age. Mrs. I. was 44 years of age, and the mother of eleven children all now living. She is a large healthy woman, and was very sick. But I had another case the same day when the child weighed but three pounds, that was equally sick, and several hours longer.

E. W. HOWARD, M. D.

Editor's Table.

OPENING OF THE SCHOOLS.—The season of medical lectures is upon us, and the crowd of students have already commenced to throng about the Medical Colleges of this city, as well as in other medical centers of the country. It is an earnest time with these young candidates for worldly success—how will they succeed? Will they bear themselves well in the race, or will they grow weary of hard work, become laggard, and disgrace the high calling which, as sacred devotees, they have selected? Yes, it is an earnest business, and we look with eagerness to the grand result.

At the *Medical College of Ohio* the regular Introductory Lecture was delivered on Tuesday night, October 6th, by Prof. Parvin. We listened to it with a great deal of pleasure, as a most chaste and elegant production, full of correct and suitable thoughts, and abounding in literary beauties. His subject was a sort of review of the influence which medicine exerts in developing the intellectual, moral and æsthetical faculties of the practitioner. For the intellect he claimed that the practice of medicine was a gymnasium, ranking as such highest among professional avocations. While the lecturer admitted the extent to which the deductive process of reasoning was employed in medicine, and gave some illustrations as that of Jenner, showing its service, yet he by no means was willing to reject the imaginative faculties. He thought that the very fact that right thinking, which is indispensable to a successful practice, and right doing are so closely linked together that a guaranty was assured that the faithful, earnest practitioner will become, day by day, a better man. The business of the physician's life is truth seeking; hence, to some extent, the fascination of the pursuit of medicine. The lecturer closed with a brief expression of the æsthetics of our professional life. This outline, of course, is meager, and only indicates the drift of a very appropriate introductory, which, we trust, the class for whom it was prepared, will show their appreciation of and taste by seeking for publication.

At the *Miami* the Introductory was delivered by Prof. Stevens. The points of the address were chiefly embraced in a considera-

tion of the following interrogatories addressed to the class: Why are about to become a physician? What are your plans of study? and, What are your professional aims and purposes? The class was assured that medicine was not any royal road to wealth or civil distinction, its pursuit involved sacrifices and toil, but so did all the earnest work of life. It had its higher motives, however, and if the physician would love his calling with fidelity he must look to these, learn to appreciate them, and strive to estimate his personal relations and fitness for them. He exhorted to study of a patient, systematic and protracted character, both before entrance on practice and after, deprecated the idea of *luck* as an element of professional success, and gave a review of the career of the late Prof. Frieck, of Baltimore, as illustrating the correctness and point of his views, especially as showing that success was a matter of study, calculation, time and a *fitness for success* far more than luck. He made the following tribute to his late colleague, Prof. Jesse Judkins, so widely known in the West, in the concluding part of his remarks; he said he should be sadly derelict to feeling, as well as propriety, if he did not embrace this occasion to bring a feeble but sincere and grateful tribute of affection to the memory of one who was so recently of us:

"What a frankness and freshness," said the speaker, "what pleasant, manly beauty; what a cheery personal magnetism—all gave character and attraction to him, when first I came, twenty years ago, to listen to the teachings of Jesse Parker Judkins. In his later days he may not have exhibited the same inclinations to the *toils* of professional life, but then he was ambitious, and spared no study, observation or labor that led to the accomplishment of his aspirations. He worked up, too, in the same rugged path that we all have to follow; a young city physician, he cared for the poor, and in his prime, and up to the end of his career, he was ever the kind friend of the needy. Steadily he made his ascent. He had the qualities of head and heart that attracted about him hosts of friends. As an anatomist, Dr. Jesse Judkins had few, if any, superiors. He was an expert operating surgeon, and had he elected to devote himself to that department of our profession, he would have attained an eminent success. His presence and manner inspired confidence in the sick room to a wonderful degree. He was modest, dignified, courteous in his bearing, and by his kindness of heart and the charm of his social

qualities, he endeared himself to all with whom he had any relations.

"None knew him but to love,
None named him but to praise."

"He was in the highest sense a gentleman, and stood forth a noble representative of the chivalric manhood which no time, place or circumstances can conceal or cause to be forgotten among his professional brethren. I especially commend to your study and imitation that largeness of heart and loyalty in friendship that grappled them to him as with hooks of steel. For me, there was a threefold bond of affection for Dr. Judkins—preceptor, friend and colleague. He guided some of my earliest studies. He was my generous and advantageous friend in the earlier days of my professional life, and he was one of the ardent founders of this School of Medicine. He was warmly devoted to the enterprise, and, alone, excepting the venerated Mussey, lent to it, perhaps, more of individual character and reputation than any other member of the Faculty. He continued his anxiety for its success and perpetuity with his latest days. On a late day of last December, after a lingering illness, this beloved friend went from us—we are permitted to believe—to join the throng of the good in a better and happier world. With sad hearts, many of those now present looked upon his face for the last of earth, and sadly followed him to the tomb. Let us earnestly and honestly forget his infirmities, imitate his virtues, and treasure up in our hearts his love. Peace and honor to the memory of Dr. Jesse Parker Judkins."

These two schools each open with just about one hundred students, and we presume their classes as they fill up will not vary materially from those of a year or so past.

Up to this going to press of our journal we have no word of the state of the class, or any notice of the Introductory exercises at the Cincinnati Medical College, neither have we any account as yet of Colleges elsewhere.

PROF. GROSS ABROAD.—We take the following pleasant *item* from the private letter of our accomplished correspondent in Berlin and Prague, Dr. Whittaker: "During the latter part of July Dr. Gross, accompanied by Dr. James Wood, of New York, passed a few days in Berlin, while on their European tour. They

were everywhere cordially received. The commanding presence and benign expression of the great surgeon everywhere excited attention. Virchow stopped in the midst of his lecture, washed his hands, and, after greeting him in the most friendly manner, introduced him to the class as the 'Father of American Pathology.' On the following evening a pleasant little party was formed for their entertainment—Virchow, Langenbeck, Græfe, Donders and other medical celebrities were present. That the evening was agreeably passed was evidenced by the fact that their "Kneipen" was prolonged far into the night.

THE OHIO LAW REGARDING THE PRACTICE OF MEDICINE.—We printed the law enacted by our State last winter in the June number of this journal. The law, in most respects, is a good one and the profession is under obligations to its author, Dr. Kemp. It provides, that to practice medicine in Ohio a man must be a graduate, or must have practiced hitherto for ten years, or produce the certificate of his qualifications to practice, from the State or some County Medical Society. Persons coming into the State, either as permanent or transient practitioners of medicine or surgery, and who do not comply with this law, are liable, on conviction of its violation, to a fine of fifty to one hundred dollars for the first offense, and for the second, a like fine and imprisonment in the County Jail for thirty days. This law went into operation on the 1st of October, ult. The only weak place in the law is the permission to Medical Societies to license; and yet, as a beginning, very good progress is made in the right direction; and we scarcely see how this concession could have been avoided to begin with. But it is evident that this permit to license may be so abused, as almost to nullify the utility of the law, and hence it becomes medical societies to seriously consider their duty in the premises. The Montgomery Co., (Dayton) Society has taken action, and, as we think, have acted with wisdom. We commend their views to other associations throughout the State. We have received their action from the Secretary, Dr. Steele, as follows:

DAYTON, OHIO, Oct. 6th, 1868.

EDITOR LANCET AND OBSERVER: I am instructed by the Montgomery Co. (Ohio) Medical Society to furnish you, for publication, the report of a committee adopted by them, to whom was referred

the advisability of appointing a Board for the examination of applicants for a license to practice medicine under the new law of the State.

REPORT.

That a due consideration of the interest of the profession requires that all our influence, as individual practitioners, and as a society, should be thrown in favor of graduation; that in view of the abundant facilities and wonderful cheapness of graduation, there is no excuse for the student beginning practice before completing his course. We, therefore, recommend that, as a general rule, this Society will not examine candidates and grant certificates for practice. But, as exceptional cases may arise in which strong reasons exist for disregarding the general rule, your Committee recommends the appointment of a Standing Committee of examinations, to consist of the President of the Society and three members, to act only in accordance with the following rules:

1st. To examine no candidate who can not show good and substantial reasons for non-graduation, and no one who will not pledge his honor to speedily complete his regular entry into the profession by graduation.

2d. No examination to be made with less than three of the Committee present.

3d. The Committee to make a written statement to the Society of every examination made, detailing the name of person examined, the special reasons which induced them to admit the candidate to examination, and the result.

Respectfully Yours,

J. C. REEVE,
L. D. KEMP,
T. L. NEAL, } Committee.

H. K. STEELE, *Secretary.*

THE PRACTICE OF MEDICINE IN A PECUNIARY POINT OF VIEW.—The New York *Medical Record* every now and then presents to its readers very excellent leading editorials. Among those which we have regarded as peculiarly truthful and practical, is one, in its issue of October 15th, with the caption given above. The editor alludes to the fact that no one should enter any of the professions for the *sake* of making money; that mercantile pursuits are the avenues to wealth; and that even the exceptional cases of the

Nelaton's, Bowman's and Cooper's, fall far below the exceptional cases of the great merchants and bankers of the world. He even suggests that the majority, perhaps, of quacks fail of great financial success. After alluding to these general propositions, and the settled feeling in the profession, that a living income can not be made from the practice of medicine, the *Record* proceeds to the following capital views, which we deem worth a repeating in full:

"We hold to the contrary. We believe that a living and a competency can be made, and made honestly, in the profession by all who have the proper talent and energy. For the benefit of those who are sceptical in this matter, for the benefit of those who are disheartened with the poor returns of their life-labor, and for the benefit especially of those young men who have a native taste for medicine, who have thoroughly mastered its general principles, and who desire to learn the best methods by which their skill and knowledge can honestly subserve their financial interests, we venture to offer these *four* suggestions:

"1. Make yourself a *practical therapist*, and not a scientific theorizer. The first, last, and greatest duty of the physician is to relieve and cure disease. So far as he fails in that, just so far does he fail in attaining the object of his high calling. Men of abstract science are needed, and we honor those who are willing to devote their lives to quiet study, investigation and experiment, that are to bring silver and gold to other generations after they have passed away. We envy those whose private fortunes enable them to do so: Claude Bernard, the great physiologist, is thus fortunate. It is said that a fortune was early settled on him, with the understanding that he should never see a patient, but devote himself wholly to physiology.

"But to one Claude Bernard there are one thousand physicians who must make their profession pay their office rent and butcher's bills.

"Now patients, even the most intelligent of them, care little for abstract science. Of pathology they know not even the meaning. They wish to be relieved and cured of their distresses. Cripples and epileptics, the blind and the paralytic, eagerly followed the Lord Jesus, not because he was a good diagnostician and pathologist, but because he *cured* their diseases. Humanity is the same to-day. The sick wish to be cured, and, as a general rule, are grateful to their deliverers.

"We would not discourage scholarship. Rather let our practitioners encourage a loftier standard of science, a severer literary taste, a purer culture, and a broader range of acquirements. But let us bring our scholarship, our knowledge of science, of languages, of art, of history and philosophy, our literary culture, our acquaintance with human nature, our moral force, and consecrate all on the altar of *Therapeutics*. There are those who affect to despise therapeutics, and the criminal fashion of reducing the science of medicine to the single element of *diagnosis*, which was originally imported from Paris, has not yet lost its hold on the profession. There are those who, by the organic constitution of their natures, despise everything that is *practical*. These we can best reprove in the expressive simile of Jean Paul Richter: 'Beautiful is the eagle when it soars aloft in the sky and plumes its distant flight toward the sun, but more beautiful still when it descends to the earth and brings food to its helpless offsprings in their nest; so the man of science excites our cold admiration when he lives above the world in the pure atmosphere of philosophy, but he commands our deepest respect and warmest love when he descends from his lofty flights and brings hope and comfort to the suffering sons of men.'

"2d. Make your patients *feel their dependence* on you, and never allow yourself to exhibit any feeling of dependence on them.

"Better to be patronizing than to *be* patronized. The patients should receive the impression that we are doing them a favor by treating them, and not that they are doing us a favor by giving us a call. We should insure their *respect* before we seek their *love*. Love that comes before respect is too apt to degenerate to pity or familiarity. A proper dignity at first sweetens all subsequent courtesies. Our patients are our pupils. They come to us for instruction, relief, guidance, and we should treat them as all successful and popular teachers treat their pupils, with kindly dignity and reserved but sympathetic familiarity. We should deal with them frankly and authoritatively, and make them feel that our will is to be their law. For the sake of our therapeutics we may indulge a patient in whims that we know to be silly, but in matters of importance we should never compromise ourselves for an instant. In the long run it is better to lose a dozen patients than to fall on our knees before any. Brusqueness and eccentricity seemed to pay in Abernethy's time; but in our generation and country, patients prefer to be treated like human beings.

Patients like to have a physician frank, out-spoken, clear, and above all *positive*. To doubt, query, or study a case in the presence of a patient is to lose half the battle. Better let the diagnosis be positive even though it be wrong. Doubt is the practitioner's worst enemy.

"3. Let your *maximum charges be high*, and carefully *graduate them according to the circumstances of your patients*.

"In regard to this matter of charges these two points are indisputable—first, that those patients who are able should pay well for their medical advice and treatment, just as they pay for everything else; and, secondly, that those who are poor, or in moderate circumstances, should not pay as high as the wealthy. If advice is worth anything it is worth a great deal, and should be paid for accordingly. In our stores and markets the poor and the rich pay alike for the same quality of articles, and if any one is unable to buy the best of everything, he can get a poorer quality or go without entirely. In the matter of medical advice it is not so. Sickness visits alike the throne and cottage. It is not a matter of choice, and when it comes, the poor man desires and needs the best advice. All who are not positively destitute should pay something, and the rich should pay roundly, just as they pay for everything else that they purchase. We are all too much afraid of driving away our patients by high charges. Ultimately, however, the courageous physician wins the victory. It is really a blessing to lose some patients. We can afford to hire some individuals to keep away from the office. Mean prices are apt to bring in mean patients; and the presence of mean patients deters and repels many who would pay large fees. It is hard to raise prices even with the wealthy, and therefore we should begin by making our fees as high as will be borne. Better to begin too high than too low, for it is easier to lower our prices than to raise them. The profession are too easy in this respect. They are apt to charge too little for their labor, and nothing at all for their opinion. Physicians are something more than mechanics, and should charge for their opinion even more than for their time and muscle. The observance of these rules will never drive away patients who are worth keeping. By charging high charges, and carefully graduating them when necessary, we shall secure the respect of those (of whom there are many, especially in our larger cities) who take pride in paying dearly for everything they get, and shall retain all—both poor and rich—whose patronage can be of per-

manent service. To raise the standard of prices is a duty that we owe not alone to ourselves but to the profession at large.

"4. Be *prompt and active* in rendering and collecting your bills.

"If medical advice and services are worth being paid for at all, they should be paid for promptly. Our patients should be impressed with the idea that our profession is to support us, and that their bills must pay our expenses. If we wish to retain our patients permanently, we should insist on prompt payment; if we wish to make them ashamed to call on us, and to drive them to other physicians, we have only to allow them to neglect our bills. There need be no delicacy in this matter of collecting, whether done in person or by proxy. A proper independence of manner is the surest way to independence of fortune.

"To those who live in large cities, and who desire to make themselves *authorities* in medical science, we say give special attention to some department that is congenial to your tastes, and make yourself a necessity to the profession in that department. This is best accomplished by cultivating scholarly and practical thoroughness, and by communicating the results of our investigations through medical journals, at the meetings of societies, and by personal influence.

"In our dress, manners, equipage, and in the location of our office, we should conform to the approved customs of the class among whom we desire to practice. Our furniture and apparel should at least not repel, even though they do not positively attract. Goethe says that we ought to conform to the world in trivial matters, in order that we may more successfully oppose it in subjects of vital import. This should be the rule for physicians.

"As a general rule the majority of our patients will be like ourselves. The attraction of character is as natural and as irresistible as that of gravity, and like doctor like patient is probably as true as 'like priest like people.' Cultivated, scholarly, high-minded physicians will have cultivated, scholarly, high-minded patients, who will gravitate to them by the law of unconscious affinity.

"Those who attempt to build up a practice on a higher plan of culture and character than that to which they belong, and for which they have affinity, will usually fail. Expensive dress, elegant furniture, and showy turn-outs, will not permanently compensate for the lack of character. Those who expect to jump into a permanently lucrative practice by the aid of mere

externals will usually be disappointed. They may 'grow into it,' as the expression is, but their growth will be like that of trees, slow, silent, and almost imperceptible."

CINCINNATI ACADEMY OF MEDICINE.—Too late for insertion in connection with the proceedings of last month, the Secretary, Dr. Nielson, furnished us with Dr. Unzicker's additional report on New Remedies and Pharmacy. As we have crowded the Academy out this month we give for this time Dr. Unzicker's notice of *Opium and Belladonna* among our editorial matter.

Opium and Belladonna.

BY J. S. UNZICKER, M. D., Chairman of Section on New Remedies and Pharmacy.

It was thought here not long ago, that belladonna as an antidote for opium poisoning was something new. That this is not the case may be seen by the following: "In the year 1570, this question already engaged the attention of the profession. Prosper, Alpin and Label were the first who pointed out the antagonism of these two remedies, as their observations had proved that they weakened each other's action. In the year 1677 the profession was so far enlightened on this subject, that Horstins and Faber proposed to use opium and belladonna as antidotes for each other. In the year 1766 the same proposition was renewed by Boucher, of Lille. In the present century the opinions *pro et contra* have appeared more numerous. For the antagonism Lippi, Graves and Carignan have especially declared themselves, who based their opinions on many cases of poisoning successfully cured by the use of these remedies against each other."—Erlenmeyer's *Subcutaneous Injections*.

We also have the following, which we print in justice to the Secretary, Dr. Unzicker, and the Tildens:

Correction.—On page 594, in the October number, the words *Mr. Tilden* were misplaced on the manuscript and ought to read thus: "Many acknowledged to him (Dr. Unzicker) the impurity of their drugs, but stated that the low-priced articles were the only ones that would command the market, etc. * * * The firm of Tilden, however, according to their catalogue, held itself in readiness to fill special orders for compounds of the full strength of the pharmacopœia."

ALL HUMAN ENTERPRISE, and especially all that depend on printers' ink for their success, must have an abundance of the sinews. During a great part of the year our cash-book footed up handsomely, but we regret to observe a serious falling off for a month or two, and as we are approaching the end of the year, and one more issue will complete the volume, we feel the unpleasant necessity upon us of making this pointed reminder that we may, with ease to ourselves and satisfaction to our creditors, settle up our dues. A very large list have not yet paid for the current year, *too many* owe additional arrears. We hope this is sufficient, and that the 1st of December will find us with clean books.

PROF. PAUL EVE, recently of the Medical Department of the University of Nashville, goes to St. Louis, and will occupy the chair of Surgery in the Missouri Medical College, rendered vacant by the death of Dr. McDowell.

PROF. JOSEPH JONES, also late of Nashville, accepts the chair of Chemistry in the Medical Department of the University of Louisiana, at New Orleans, and will hereafter make his home in that city.

THE LONG ISLAND MEDICAL COLLEGE.—In the proper place the advertisement of this school will be found. Some time since we noticed the resignation of the two Flints and perhaps one other of the Faculty. It will be seen that the vacancies are all filled, and with Hamilton, Armor and Ford as part of the teaching force, we are very sure the school will continue, as in the past, to be one of the best in the country.

MR. GEORGE W. CHILDS, of the *Philadelphia Ledger*, has done a graceful thing, and added another bond which holds him as with hooks of steel to the "craft." He has presented to the Typographical Society of Philadelphia, the title deeds for a burial lot in Woodland Cemetery for printers. He has also provided a fund for meeting the burial expenses of deceased brothers of the craft. Mr. Childs has greatly prospered in his worldly affairs, and this is only one of his many beneficent uses of the goods with which he is endowed.

THE FIRST ANNUAL MEETING of the *Dominion Medical Association* was held in Montreal, on the 2d, 3d and 4th of September. We congratulate our neighbors on the efficient character of their organization. It will be the means of doing a vast amount of good in Canada; it will advance every professional interest, and in many ways promote the harmony and good fellowship of medicine. Hon. Charles Tupper, M. D., is President.

THE ILLINOIS STATE MEDICAL SOCIETY met in Quincy, May 19 and 20. The Transactions embrace valuable papers from Drs. Bogue, Earle, Andrews, Davis, Roman, Holmes, Moore, Hamilton, Cook and Prince. We have not the time to give any analysis of these reports at present.

THE AMERICAN JOURNAL OF OBSTETRICS.—Number two, for August, of this excellent quarterly is received. It contains articles from Dr. T. B. Sterling, Prof. H. R. Storer, translations from Dr. Snelling and Dr. Treskatis, together with the usual amount of editorial matter, reviews and selections. Published by W. A. Townsend & Adams.

HEGEMAN & CO., of New York, have placed us under obligations by forwarding a box of their superior Cod Liver Oil, Elixir of Cinchona, etc. We have already had opportunity to make a trial of these, and have great pleasure in speaking of the satisfaction they afford. They are handsomely put up, and attention is given to the pharmaceutical details to make preparations both pleasant and efficient; the Ferrated Elixir of Cinchona is particularly fine.

BRILLIANT THERAPEUTICS.—The following luminous prescription was handed us recently, with the assurance that it is veritable. What indications of treatment are to be met by this extraordinary medication we make no pretensions to unfold:

R.—Ext. Checocom, grs. xxv.

Inf. Polyfox, ʒ iv.

Micæ Penis, ʒ i

S.—Take at once!!

THE DOMINION MEDICAL JOURNAL.—In a recent notice of this new journal we expressed our regrets that the editor, Dr. Brock, had seen fit to admit in his business department a card of a notorious Eclectic concern. We are gratified to know that there was a mistake in this matter; that the editor of the "Dominion" was quite as much mortified that his journal was used in this manner as his friends in the "States" could be for him; that he was greatly astonished that Dr. Lizars should have identified himself with irregular medicine in any shape, and, finally, that he holds no sympathy whatever with quackery in any form. We are glad that we can say all this for Dr. Brock and his journal by authority.

TRANSACTIONS OF THE OHIO STATE MEDICAL SOCIETY.—At last we have the Transactions for 1868. In justice to the printers and the Committee on Publication, we will say that the volume would have been ready for delivery at least one month sooner, but the attempt was made to have each author read his own proof, and each gentleman seemed indefinite in his task, returning proof slips at various delays of from three to ten days. The volume is unusually large, and contains much valuable matter. Those who fail to receive a copy will take the hint that they have a little account current with Dr. Thompson, the Treasurer, and he will be happy to hear from them.

HOW QUACKS WERE TREATED IN THE FOURTEENTH CENTURY.—From a very interesting volume, entitled "Memorials of London and London Life in the Thirteenth, Fourteenth and Fifteenth Centuries," we extract the following instance of the manner in which medical imposters were then treated:

One Roger Clerk professed to be learned in the art of medicine, and prescribed, for a woman suffering from fever, the hanging of a certain document round her neck, containing certain words which he stated were an antidote to the disease under which she suffered. The charm did not work. He was summoned before the mayor and alderman in the Guildhall of London, at the instance of the husband of the patient, to show upon what authority he practiced the art of medicine. His own statement was sufficient to convict him of being a rogue and an im-

poster, and he was forthwith ordered to be placed in the pillory, and therein to be punished for the offense against society. His progress to the pillory is thus graphically described: "It was adjudged that the same Roger Clerk should be led through the middle of the city, with trumpets and pipes, he riding on a horse without a saddle; the said parchment and a whetstone, for his lies, being hung about his neck, an urinal also being hung before him and another urinal on his back."

The offense which Roger Clerk committed was venial compared with some of the flagrant crimes which quacks nowadays too frequently perpetrate. If he was righteously punished, how should we mete out punishment to the harpies and villains of our time, who prey upon the weakness and credulity of the miserable victims who are attracted by their infamous advertisements to place themselves under their care.—*Lancet*.—*Med. News and Library*.

NEW BOOKS.

SEATON—Hand-Book of Vaccination. Lippincott & Co.

BIRCH—Constipated Bowels. Lindsay & Blakiston.

HARPER'S MONTHLY MAGAZINE closes up another magnificent year with the November number already issued, and to be had of all dealers in books and periodicals. No monthly in this country is more universally acceptable around the family circle. December begins a new volume. Any of our subscribers who wish to take either Harper's serials—Magazine, Weekly or Bazar—in connection with the Lancet and Observer, can have the Lancet and Observer, and either of Harpers, for \$6.50 per annum, thus saving half a dollar.

FOR SALE.—An order for one of Palmer's Artificial Legs. A discount will be made on its face.

A MICROSCOPE FOR SALE.—We have had left at this office, for sale at a low figure, a Microscope, made by a first class maker, but not in perfect order.

DOCTORS are advised to look in at W. B. Spragen's, Fourth and Vine, for a fine supply of overcoats. Fall and winter goods cheap.

Reviews and Notices of Books.

Electro-Physiology and Therapeutics. Being a study of the electrical and other physical phenomena of the muscular and other systems during health and disease, including the phenomena of the electrical fishes. By Chas. E. Morgan, A. B., M. D. New York: Wm. Wood & Co., 1868.

Dr. Morgan has presented to the profession this his dying testimonial in the shape of a handsome volume of 700 pages. We say his dying testimonial, because the author died soon after completing his work, and before he had an opportunity to see the result of his labors in print. Dr. W. A. Hammond, of New York, has given the work the benefit of his editorial supervision, and this is sufficient guarantee of the fidelity with which it appears from the press, as well as some assurance of the intrinsic value of the work itself. A very large part of the volume, we find, is devoted to the scientific details of the subject; and in all that pertains to the exhaustive discussion of electricity, we think our author has fully presented his subject. So, too, we find all the varied apparatus concerned in the development and application of electricity are exhibited and treated of at length. Whoever, therefore, desires to make himself thoroughly familiar with this subject, in its scientific aspects, will find everything in this book to aid his studies. We presume there will be few errors, if any, in all his minute details. If we have any criticism it is that so much of so extended a treatise is devoted to this scientific aspect and so little to the details of therapeutic uses. Just now there is a strong disposition to look to the use of electricity as an important therapeutic agent, and the busy practitioner wants to know, What are the most convenient modes introduced of applying this agent? What pathological states are indications? What stages of disease? To be sure something of all this is embraced in Dr. Morgan's book, but it is presented with such an amount of detail that the busy man will scarcely take time to cull it out, and will look about for something more condensed or abandon all idea of using the remedy at all as a curative measure. For sale by Robert Clarke & Co. Price, \$6.50.

Criminal Abortion; its Nature, its Evidence and its Law. By Horatio R. Storer, M. D., L.L. B., &c., and Franklin Fiske Heard. Boston: Little, Brown & Co., 1868.

Prof. Storer, one of the authors of this volume, is well known to the medical profession as having already devoted considerable attention to the subject of criminal abortion, and topics of a kindred character. Indeed, as long ago as 1859, Dr. Storer wrote a series of contributions for the *North American Med. Chir. Review*, which were collected in book form, and the book before us seems, in a considerable degree, to be a rewriting of the papers of that date.

The present volume consists of two parts. *Book First*—From the stand point of Medicine. *Book Second*—From the stand point of Law. The topics of the several chapters are, Is Abortion Ever a Crime; Its Frequency and its Causes; Its Victims; Its Proofs; Its Perpetrators; Its Innocent Abettors; Obstacles to Conviction. Then we have, The Common Law; English Statutes and Indictments; Against whom the Indictment lies; Indictment; Evidence.

It will thus be seen that these two authors have jointly presented a thorough but brief outline of the whole subject in all its medical and legal bearings; and we are very sure the two professions will find the work a very satisfactory one. For sale by Robert Clarke & Co. Price, \$2.25.

The Jewett and Russell Prize Essays of the Connecticut Medical Society. By Roberts Bartholow, A. M., M. D., Professor of Materia Medica, etc., in the Medical College of Ohio, etc. A reprint from the Proceedings of the Seventy-sixth Annual Convention of the Connecticut Medical Society.

Two essays are embraced in this little volume, which received the two prizes offered last year by the Connecticut State Medical Society. One, the Jewett Prize Essay upon the topic, *By what Hygienic Means May the Health of Armies be Preserved?* The second, the Russell Prize Essay on the topic, *The Therapeutic Uses and Abuses of Quinine and its Salts.* The prizes in both cases were awarded by the Committee to Prof. Roberts Bartholow of this city.

We have read these essays with such carefulness as time would permit, and at the time marked several points upon which we

intended to comment, but find that we must content ourselves with a briefer notice than we should like. In the *Essay on Army Hygiene*, we think, Dr. Bartholow very correctly dwells upon the idea that the efficacy of armies is not so much in their mere numerical strength, as in the freedom from conditions of sickness and tendency to mortality, and one of the means of assuring a healthy standard he suggests is advancing the age of recruits—our author thinks twenty-five a judicious minimum age for receiving recruits into our army, an age certainly much more correct than the present of eighteen. The *training* of recruits is another point materially affecting the well-being and usefulness of armies in active service. In the late civil war a large proportion of our troops became invalided within the first six months of service, and remained so, owing to bad management and injudicious training. The question of the ration is also of great importance, and Dr. Bartholow points out a distinction we have not elsewhere seen noticed, viz., that the ration of the American Army is more than necessary for the regular soldier, but scarcely sufficient for the new recruit. This grows out of a variety of causes, which all surgeons in charge of hospitals have had occasion to learn; the recruit is usually more wasteful, less accustomed to prepare food, has not learned the varied means the old soldier has of accumulating and economizing his supply, and hence the propriety of having one or more skillful cooks in every depot of one thousand men; and so on through the dangers of camp life—crowd poison, scorbatus and malaria—but we have not space to follow these out. But they commend themselves altogether as of much importance for the health of armies.

The *Essay on Quinine* considers its *specificity*, its *physiological effects*, rational *therapeutics*, empirical therapeutics and its *abuses*, but we can not now give any further analysis of the points which our author discusses. The copy which we acknowledge is handsomely published, and, as we have indicated, readable.

Vesico Vaginal Fistula from Parturition and other Causes; with cases of recto-vaginal fistula. By Thomas Addis Emmett, M. D., Surgeon-in-Chief of the New York State Woman's Hospital. New York: William Wood & Co., 1868.

This interesting little volume is intended to exhibit some of the experience of the author in the management of a class of very

serious accidents to women. Dr. Emmett generously accords to Dr. Sims a prominent credit in the curative treatment of this vexatious character of cases. Dr. Emmett, however, may now be permitted to speak with a degree of authority for himself. having first acted as the assistant of Dr. Sims, and then as Chief of the Woman's Hospital, he has been personally concerned in a large number of cases. He says: "Previous to October, 1867, I had had about two hundred and seventy cases under my charge. About two hundred had been cured, five I had regarded as incurable, and between fifty and sixty returned home improved, the greater portion of which will be cured if they ever return."

The successive chapters of the book detail first the nature of the accident and how it occurs, the instruments needed to operate, and general remarks upon the operation. We then have a large number of individual cases related, the peculiar features of each, and the steps found necessary to secure or promote a curative process in each. Indeed, there is a good deal in this book which is itself clinical, and the reader will gather almost the advantages of clinical instruction by its perusal.

A few men, Sims, Emmett, Bozeman, and perhaps some others, deserve the credit of revolutionizing the surgical management of vesico vaginal fistula, hitherto one of the opprobria of our art; and yet, as Dr. Emmett very truly says, now that some Columbus has shown us how to sit the egg on end, there is no reason why this operation should be confined to comparatively so few surgeons. Readers will find this a readable and instructive little book. For sale by R. W. Carroll & Co.

Obituary.

DEATH OF PROFESSOR JOSEPH N. McDOWELL, M. D.—This well-known surgeon died in his adopted city of St. Louis on the 25th of September, in the sixty-fourth year of his age. Dr. McDowell was a native of Kentucky, a graduate of Transylvania University, and well known as a surgeon and able teacher. He was at one time associated with Drake and other distinguished gentlemen

in teaching medicine in Cincinnati. We believe he occupied a position in the Medical Department of Cincinnati College, and in the Medical Department of Miami University during its brief history. About the year 1840 he went to St. Louis, and established the Missouri Medical College, popularly known as "McDowell's College," and was identified with it until his death. The College with which he was connected, and the St. Louis Medical Society adopted suitable resolutions.

DEATH OF MRS. HIBBERD.—We are pained to announce the death of Mrs. Catharine Leeds, wife of Dr. J. F. Hibbard, of Richmond, Indiana. Mrs. Hibberd was a victim of consumption. She was an accomplished wife and woman, and our sincere sympathies are enlisted for this sad affliction which has come to the house of our friend.

DEATH OF MRS. NORTON.—Died, in the city of Cleveland, Monday, October 5th, with puerperal convulsions, Mrs. Sarah C. Norton, wife of Prof. Sidney A. Norton, of Miami Medical College. Another bereaved friend suffers a lacerated heart and desolate hearthstone.

JAMES SMITH, M. D.—Died suddenly at his residence, in Woodsfield, Ohio, on Sunday, October 18th, of apoplexy of the heart, aged fifty-two years. Dr. Smith was an excellent practitioner and a worthy Christian. He was a graduate of the Miami Medical College of Cincinnati, of some ten or twelve years ago—in the year 1857, we think. He has left a wife and three children to mourn a sudden and unexpected bereavement.

Abstracts and Selections.

PRACTICAL MEDICINE.

Curability of Consumption.

President Day, of Yale College, died in August, 1867, at the very advanced age of ninety-five years. He was an instance of what care and judicious treatment can effect in a disease often

considered necessarily fatal. We take some facts of his life and of the autopsy, from the *Transactions of the Connecticut State Medical Society*, reported by Prof. S. G. Hubbard, M. D., of New Haven.

Jeremiah Day was born in Washington, Conn., Aug. 2d, 1773; and during the war of Independence was old enough to appreciate the nature of the issue involved in that struggle, and well remembered having seen some of the actors.

His infancy and boyhood were marked by indications of feeble vitality; and the prospect of his arriving at the maturity of manhood, never very flattering, sensibly diminished as he approached that period. He entered the Freshmen class in Yale College in 1789, but was soon obliged to leave college on account of a "pulmonary difficulty," which was, doubtless, the incipient stage of the organic disease of the lungs, which subsequently developed itself. These symptoms were so far alleviated, that for two years he taught a school in Kent and Winchester, when he found his health so much improved that he returned to college, and graduated in the class of 1795.

The succeeding six years, a period of great feebleness, were spent partly in teaching at Greenfield for a year, as tutor in William's College for two years, and as tutor in Yale College for three years, during which last period he studied theology, and preached occasionally in vacant churches in the vicinity, until 1801, when he was elected Professor of Mathematics and Natural Philosophy in the college.

He was prevented, however, from entering upon his professional studies, by the occurrence of an alarming pulmonary hemorrhage, which happened after a Sabbath service at West Haven, where he had preached for Rev. Dr. Williston. Other hemorrhages followed, by which he was greatly prostrated, losing large quantities of blood. According to the prevailing practice of that time, he was freely bled from the arm—"the doctor's taking," as he remarked to me, "nearly all of the little remaining blood in his body."

In this condition of extreme exhaustion, at the age of twenty-eight, he abandoned temporarily the purpose of entering upon the duties of his professorship, and in September of that year, he made a voyage to Bermuda, to try the effect upon his health of a warm climate. While there he was treated with tincture digitalis to the extent of producing its cumulating effects, which were so

profoundly sedative that for a time his life was despaired of. Indeed, so reduced and attenuated was he on leaving home, that none of his friends expected to see him again alive, and the published letters of Prof. Kingsley and others of that period, lament him as already lost to science and the world. He returned, however, in the following April, but without having experienced any material benefit; so that he now gave up entirely all idea of fulfilling his collegiate appointment; and bidding farewell to his associates, he retired to his home among the hills of Washington, to die.

The hemorrhages continued, and were followed by venesecti ons until a Dr. Sheldon, of Litchfield, who enjoyed a wide reputation for "curing consumption," chanced to see him, and casually remarked that "he needed iron," and "he believed he could help him."

Although the patient was evidently in a hopeless decline, he was placed under the care of Dr. Sheldon, who would seem to have been an acute observer, and in his knowledge of pathology and therapeutics, far in advance of his time. Under the use of preparations of iron with bark and nutritious food, Mr. Day soon began to exhibit signs of returning health and strength; and in 1803, although he seemed to his friends literally like one raised from the dead, he was so far restored to health to be inaugurated as professor. From this time all symptoms of pulmonary disease disappeared, and did not return.

On opening the thorax only a moderate quantity, perhaps a pint, of serum was found in both cavities—the lungs were every where quite free from tubercular deposits, and in all respects healthy. In the apex of each lung, however, was found a dense corrugated circular cicatrix, an inch and a half or more in diameter; also a *third* circular cicatrix on the left side of the left lung, a few inches below the apex, each involving such a depth of tissue as to indicate that the vomicæ of which they were the remains, had been large and of long duration. Both lungs were slightly adherent to the apex.

Here then, was all that remained to mark the beginning, progress and cure of a tubercular consumption, occupying *twelve years* in its period of activity, and with its incipient stage dating back more than *three-quarters of a century*. A legible record surpassing in interest and importance to the human race, those of the slabs of Nineveh; or the Runic inscriptions.

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E. B. STEVENS, M. D., EDITOR.

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Original Communications.

ART. I.—*A Study of Rheumatism.—Its Dynamics, Pathology, Treatment and Philosophy.*

Read to the Muskingum County, Ohio, Medical Society, 7th October, 1868.

BY Z. C. McELROY, M. D., President.

The purpose of organic life in the human body is the construction of its various tissues and organs out of other organic materials. That of vital life or force is the preservation of types and forms with changing materials. No animal tissues are built up directly from the elements of the inorganic world. Vegetable tissues alone, are thus constructed. Organic chemistry, until comparatively recently, never constructed from the elements directly, the lowest forms of organic matter; but it is done now. Fats, oxalic and acetic acids, urea, and many other organic compounds, have been synthetically built up from the elements. So of the reduction of complex organization; organic chemistry now controls the retrograde metamorphosis, so as to imitate the products of reduction by living organisms; that is to say, that the decomposition of dead flesh or tissue, is so controlled as to obtain the same products, as its metamorphosis by, and in the living body, would have yielded, as carbonic acid, water, urea, urates, lithic acid, etc., etc. In fact, many of the hitherto regarded vital processes and products in the human body, and for that reason considered incomprehensible, have been explained and imitated

out of the body; and in the end it seems probable all its functions will be explained.

With these facts to guide us, the study of diseased action in the human body now and in the past are very different things. Disease has been narrowed down to questions of tissue making and the relations of matter and force as they undergo their mutations in the building up and breaking down of animal tissues.

Given, the reproduction of organs and tissues in normal mode, type and form, and man would never grow old, and disease and death would never occur! Thus, negatively, as well as positively, every grade of diseased action is shown to be simply a departure from the normal processes of tissue making and tissue reduction in animals.

The subject for our discussion at this meeting, is Rheumatism an opprobrium of the medical art in all the past of the world's history. It has been diligently studied in every age, with the result of its being nearly as much of a mystery to-day, as at any former period. Patients suffering from it have been subjected to every variety of treatment, with, but at best, varying success by any method. The vaunted specific, or plan of treatment of this year, is supplanted by a newer and better one next. In fact, its symptomology and pathological lesions, (its havoc among the tissues), are the only certainties coming to us, as the result of twenty centuries of observation by all the great lights that have shone in the medical world during that time. That such should have been the case need excite no wonder, when it is remembered that the modern doctrines of force, the recent achievements of organic chemistry, and the consequent changes in physiology, alone furnish the *terra cognitis* upon which to base a philosophical study of any diseased action.

It is the purpose of this paper to present an analysis of the phenomena of the several grades of diseased action, described in medical literature under the nomenclature of acute, sub-acute and chronic rheumatism, as well as some abnormal forms not readily included in any of these classes.

The causes of rheumatism are all those disturbances in the forces of nature that interfere with tissue making or nutrition, as sudden and violent changes of temperature, with moist atmosphere, retention in the body of the debris of tissue metamorphosis, (suppressed excretions, or secretions), etc., etc.

In symptomology rheumatism has many points of resemblance

to hysteria, minus the interference with tissue making. In both there are the most puzzling modes of force developed. The most striking feature, common to both, is the absence of dynamic harmony. The present state of knowledge does not suffice to explain all the phenomena, though the facts of modern physiology, chemistry and philosophy, give partial solutions of some of them. To say that some of the symptoms are due to reflex action, or to sympathy, is only to substitute one form of ignorance for another. The relations of matter and force must be looked into more critically than that. Thus the mechanical results in hysteria or spasms, contortions and convulsions, are probably dependent on increased destructive metamorphosis in the spinal chord and its supplemental nerve masses—the plexuses and ganglions—while the opposite condition of paralysis is, most likely, due to a more or less complete suspension of molecular changes in the same parts. If it were not so, there would be, in the absence of mechanical results, increased temperature which is absent.

Cataleptic states, again, require for their understanding that the molecular changes shall be continuous, not remittent, or intermittent, as in convulsions, etc., etc.

In all these conditions in hysteria there is not much interference with general tissue making. The changes, judged by the phenomena, are confined to the nerve masses; and in most cases there is retention, probably of effete matter, the result of deficient elimination.

As there can be no mode of force manifested to our senses, not due to some other pre-existing force—and the presence or manifestation of one mode of force is coincident with the disappearance of some other mode—so in the abnormal modes of force in the living body, in rheumatism and hysteria, the controlling and co-ordinating influence of the sensorium commune, seems to have disappeared; the head of the family of organs which comprise the living organism, is, as it were, absent, and the servants are having a general good time “cutting up.”

The feature of rheumatism which distinguishes its chronic grades more particularly, though some symptoms of the acute are included from hysteria, is the more serious interference with tissue making. The abrupt development of local symptoms, and their sudden cessation at any given point, coincident with a re-appearance of them at some other, and it may be, remote part of the body, are common to both. The development of a local rheu-

matic lesion in the heart is of the gravest importance, because it does interfere with organic nutrition in the substance of that organ, while a similar hysterical complication dependent on dynamic discord, increased molecular changes in the nerve masses, occasions no concern, for the reason that it does not interfere with organic tissue making in its substance.

Divest acute rheumatism of its local super-oxidations, or local interference with organic tissue making, dependent on the absence of dynamic harmony, and the remainder would constitute a continued or remittent fever, or a general super-oxidation of all the tissues common to every grave type of fever. For in the graver forms of rheumatism, no matter how treated, the peculiar phenomena of the general per-oxidation of tissue, as evidenced by high temperatures, do not terminate in convalescence, until the tissues of the body are greatly wasted or changed. Let any physician examine closely a case of rheumatism of a severe type, and ask himself this question, "How is tissue making or nutrition proceeding here?" The reply, or conclusion will be, "It is well nigh annihilated." The measure of waste or tissue oxidation is the temperature. If the waste is large, the temperature will be high—measured by the thermometer—sometimes five, or six, or more degrees above natural. Grave cases of rheumatism, then, are to be regarded as remitting or continuous fever, plus the local super-oxidations and want of dynamic harmony.

No explanations of why the local super-oxidations should, as they do, occur in particular classes of tissue, can be given with present knowledge; but it is well to bear in mind that that which is the unknown of to-day, may be the known of to-morrow. "*The terra incognita* of to-day, may be boldly mapped on every school boy's atlas to-morrow," says a distinguished foreign chemist in speaking of physiological chemistry.

The remaining phenomena or symptoms of acute rheumatism, being common to the graver forms of fever, do not offer any thing for remark in connection with the present study, more particularly of its dynamic and philosophical peculiarities.

It is all the more necessary thus to view acute forms of rheumatism, because it opens the way for correct therapeutics and prognosis. It is also sustained by the most modern treatment of the disease, in at least one of the London Hospitals, which is the confinement of the patient between blankets in bed, and good living.

In the Paris hospitals the journals report the most successful treatment to be good food, and that most important of all therapeutic agents to equalize tissue making—quinine. In our own country the favorite treatment of later years has been with sa-lines. These are powerful agents in promoting the disintegration of tissue, and the oxidation and elimination of effete matters—the debris of dissolving tissue—which accumulate so rapidly owing to the general as well as super-oxidation of the tissue.

The rational and philosophical treatment of acute or inflammatory rheumatism, contemplates much the same management as continued or remitting fevers, viz: equal temperature, cleanliness, watching carefully elimination, mitigating the severity of the local complications by heat or cold, and anodynes internally and externally, and by hypodermic injections of atropia, or atropia and morphia combined. But of more importance than any one thing else, the means for reconstructing the wasting tissues of the body.

The sub-acute and chronic forms of rheumatism differ from the acute only in the degree of interference with tissue making, and the abnormal modes of force or dynamic discord. In the sub-acute the interference with tissue making in the nerve masses is often shared by the muscles and their aponeurotic attachments, as well as the denser tissues about the joints. The mildest and most erratic forms approach more and more closely to hysteria, in the fact that the interference with tissue making is more and more confined to the nerve masses. General tissue making is but little interfered with; but the abnormal modes of force developed are not a little perplexing, but can, for the most part, be unraveled by patient analysis.

The pathology of these several forms differ from the acute, and from themselves only in the degree and locality of interference with tissue making; the dynamics and philosophy being the same for all.

The most successful remedial management of any or all these milder forms, either in hospital or private practice, combine all those agencies whose empirical results are known to improve nutrition or tissue making, or the general health. In them all the patient is to be treated, for in the main the disease will take care of itself.

The therapeutic agents are iron, quinia, simple bitters, zinc, bismuth, and good living. In the mildest and most erratic forms

the preponderance in therapeutics is to be given to those agents empirically known to improve tissue making in the nerve masses, as zinc, bismuth, phosphates, iron, quinia, etc. For the dynamic discord, or local pains and discomforts, belladonna, stramonium, hyoscyamus, etc., are to be preferred to opium, as it is their particular effect in the system to retard molecular changes in nerve masses. In all grades the most careful and persistent attention must be given to the elimination of the debris of tissue metamorphosis, for which purpose the salines hold the first rank, though sometimes small doses of mercurials may be needful. The constitutional treatment may require, in some instances, to be supplemented by counter-irritants at or near the seat of the local lesions, as caps, leeches, blisters, and rubefacients, whose effects are to change nutrition at and near the points of their application.

Certain natural mineral waters in some inveterate chronic cases prove eminently successful. Visits to such localities, away from home, are usually made in pleasant weather, and involve a more or less complete change in habits, mode of life and surroundings, with freedom from care and despondency, owing to the number of new impressions constantly pressing on the mind.

Profiting by these results, mild salines may very properly be given coincidently with the general tonic course in cases where elimination is tardily or imperfectly performed, and the train of morbid mental phenomena interrupted as much as possible by short and frequent jaunts to the more busy places of human intercourse, as fairs, public meetings, etc., etc.

By the general tonic and saline alterative course the organic processes of nutrition and waste, or oxidation, are both quickened oftentimes with great profit to the sufferers from interferences with organic tissue making and dynamic harmony, known in medical technology as sub-acute and chronic rheumatism.

It will be well ever to bear in mind, no matter how apparently intricate and contradictory the phenomena in diseased action, that nothing can occur in the human organism which is not the result of fixed and unchangeable laws; and that patient research and investigations will often be rewarded by very satisfactory solutions of what on the surface would seem to be results of mere chance.

ART. II.—*Cerebral Paresis.*

BY D. A. MORSE, M. D., of Midway, Ohio.

That condition of the brain in which there is no appreciable organic change, but in which there is to a greater or less extent, loss of functional power exhibited in the diminished intellectual, motor or sensory power, has been termed *Cerebral Paresis*. It may vary in degree from simple enfeeblement, rendering the mind unable to sustain further efforts to complete loss of power sufficient to characterize dementia.

It may be difficult to conceive of a train of morbid symptoms so important that they deserve attention, and which may arise without organic lesion. I question whether this can ever be the case, though in our imperfect state of pathology we may so affirm. It becomes far more probable that this is not the case, when we consider that but a few years ago our knowledge of pathological anatomy did not enable us to recognize any morbid condition existing in many grave disorders, as mania, epilepsy, etc. "Constant dropping wears the stone," and though the loss of the first particles may be unperceived, the continued action manifests in due time that there is loss. We may with perfect consistency assert, then, that cerebral paresis is a condition of the brain which we are able to recognize only by the train of morbid symptoms that characterize it, and of which our present pathology is ignorant.

The conditions of the brain in paresis may be considered as two: 1st. Cerebral Anemia. 2d. Cerebral Hyperemia. In either of which conditions paresis may be consequent upon exhaustion from prolonged mental exertion; physical exertion; sexual abuse; reflex irritation, (as catarrh, intestinal irritation, etc.); debility resulting from disease; heat excessive, and excessive cold; deficient nutrition, and all causes that produce great nervous prostration, or "shock," as fear, severe injury, etc.

In our paper upon cerebral circulation, we have already commented extensively upon the two conditions of the brain referred to above.

Every medical man is familiar with numerous instances of the causes we have cited as being productive of paresis. The first of these, paresis resulting from prolonged *mental exertion*, is seldom so grave that medical interference is required. Our efforts are more frequently directed to overcome the effects of sedentary life.

It is not the cerebral exhaustion we attempt to remedy, but anemia, disordered digestion, which results in great nervous prostration. Our attention is due, then, more to the violation of hygienic rules, than great mental exhaustion. We have an every day occurrence of this in the Minister of the Gospel. Through the week he sits within his study. His whole attention is absorbed in the selection of a subject, and digestion of it for the coming Sabbath. His food, perhaps bolted whole, is not appropriated for the support of his physical system, the mind being absorbed in his labors. He becomes a confirmed dyspeptic. He is then incapable of either prolonged mental or physical exertion. But the necessary number of sermons must be produced. With trembling hand, aching head, and a sense of his insufficiency, he labors on till nature overtired will endure no more. This may be better illustrated by a single case:

Rev. C—, aged 38, tall, spare, nervous temperament, was a victim of dyspepsia. He suffered severe pains in the lumbar region, and in the track of the sciatic nerve. He ate his full diet; confined himself to the house; spent his time in study. Complained of confusion of ideas; loss of memory; want of power to concentrate his mind upon his studies. Debility ensued; constipation; sleeplessness. He was compelled to abandon his pulpit. In this condition the patient reads continually. It is not digested and is as soon forgotten. He is then informed that he has "studied too hard." Let this person read the same amount, take sufficient exercise, adopt rigid hygienic measures, and the paresis will vanish. We have with the young pupil, exhaustion of the brain followed by a train of symptoms more severe. In many cases there is permanent organic change.

That mental exertion is not free from organic disturbance, is proved by the excess of phosphates thrown off by the kidneys after such exertion; add to this, then, irritative dyspepsia, and the brain continues to grow powerless. Were we treating of dyspepsia, we would discuss fully the relation of sciatica to this class of cases.

Physical exertion sends the blood freely through every capillary of the system. The overloaded brain finds relief.

Physical exertion, uncombined with mental activity, is like rest to a muscle when applied to the brain. It becomes torpid.

A condition obtains with those who continue long physical exertion without mental exercise, that is characteristic of paresis in

an eminent degree. They are incapable of remaining awake long when their mind is engaged. They readily fall asleep in attempting to read. This is a condition of no great importance. It is one of blunted intellect—stupidity.

The brain from long continued inactivity soon becomes anemic. Like an arm held long in a sling it is useless, until healthy exercise has given it power.

Prominent among the causes of cerebral paresis is that of sexual abuse. Perhaps no one cause affects so extensively the American people. They consult you for a thousand complaints, commingled, all traceable to this fruitful source of evil.

These patients complain of great weakness, inability to endure fatigue, pain in the back and limbs, acidity of the stomach, flatulence, dryness of the throat accompanied by a constant effort to clear it of mucous. One will say, "put your hand on my stomach, feel it beat." Another, "my heart jumps and thumps so, that I am unable to rest at night." There is at times scanty urine, loaded with carbon and the coloring matter of the bile; again it is pale, copious. When scanty it is hot. The head is heavy. The patient says it "feels sore." There may be pain over the eye. There is generally an anemic appearance. The eye looks pearly white, dead or glassy. You examine them relative to a paretic condition of the brain.

One patient now under treatment says: "I am unfit for business; my head feels full; my ears ring; feel just as though I had taken twenty grains of quinine. I can not remember anything. Every thing gets confused. If I attempt to run up a column of figures, I forget before I am half way through, and am compelled to begin again." This patient is free from constipation. Is of a bilious temperament, and more a subject of diarrhea. There is great tenderness along the cervical and upper dorsal vertebrae; numbness of the arms; pain in the fingers. Patient is compelled to lie down. Says that when he gets up his head is dizzy, and feels too full of blood. Here the sympathetic nervous system is chiefly at fault. The vaso-motor is that suffering paresis. The vessels yield too readily to pressure.

Claude Bernard has shown that there is dilatation of the vessels from vaso-motor paresis. We have here symptoms in part that would arise were we to sever the vaso-motor nervous supply. There is great heat; flushed face; relaxation of the vessels. The results following treatment prove this to be true in this case.

In another case paresis is shown in great inability to endure mental exertion. The patient awakes frequently at night from fright occasioned by horrid dreams. At one time he was engaged in separating two neighbors who were engaged in a personal combat. The effort awoke him. At another, the effort to drive two horses over a high rail fence, awoke him. He suffers from indigestion, yet can not remain comfortable long without the stomach contains food. There is also relaxation of the cerebral vessels in this case. A night cap of wine produces a comfortable sleep. This case when given tonics, and other treatment, as indicated, was relieved, but a return to his former habits has produced a return of his disease.

With females excessive sexual indulgence is accompanied with severe neuralgia, more than is common to males. Their nervous system is less capable of enduring prolonged excitement. They become irritable.

These patients suffer from deficient nutrition. The ill-nourished nervous system exhibits this condition in its irritability; spasms of muscles, and hysterical manifestations.

Sexual abuse, with that class of females known as hysterical, renders the duties of the medical man laborious. No doubt every one has often wished he could administer treatment where these cases are tedious and vexatious to the husband, for it is almost universally married persons we are asked to treat.

Reflex irritation, or, in other words, irritation within the viscera reflected back upon the brain, is a common and often grave complication of disease. It is in part to this that is due the want of power manifested in the dyspeptic. There is what has been termed reflex relaxation. A vessel that has been excited for a great length of time by an irritant, sooner or later yields and becomes powerless. Relaxation follows. With the child more frequently than the adult in intestinal disease, we see first great contractile power exhibited in the vessels.

In a case under treatment a few days ago, there was great vascular excitement. The patient, a boy two years old, was seized with a violent attack of dysentery. There was great arterial excitement; heat of skin; tenesmus. During twelve hours the child had five convulsions. The pupil was contracted. The intestinal irritation produced arterial excitement, and convulsions followed from anemia of the nervous centers. This was relieved in the usual manner.

In these cases, unless there is improvement, the patient starves to death. He may take nourishment, yet it is not appropriated. He *melts down* and is discharged. The diminished temperature warns us that the body is being consumed to support the flame of life. Relaxation of the vessels then takes place. The pupil, which is a safe index to this condition, dilates. In proportion as the excitement has been great, so is the relaxation observed; yet in many of these cases this condition is followed by a return of power to the vaso-motor nerves. The vessels contract; life begins anew.

In the case I have referred to, the vascular contraction continued for five days. The febrile excitement had abated; the patient was fast passing into the opposite condition. Insufficient assimilation exhibited itself in the wasting frame; coolness of the extremities; dilating pupil; stupidity. *Choreic* symptoms then appeared. These indicating insufficient nutrition of the nervous system. Prostration was developed in a greater degree, and death ensued.

In many cases in which this condition of the vaso-motor system is observed, the slightest influence of an anæsthetic produces death. Opiates will produce temporary contraction of the pupil; but are followed by still great relaxation. Removal of the irritating cause alone will accomplish the desired end.

I have now under treatment two aged patients, both convalescent, that have exhibited well marked symptoms of paresis as a result of catarrh, combined with the effects of debilitating disease. One a lady, Mrs. Stanford, suffered several weeks with diarrhea. She then became a victim of Ague. This was followed by a remittent fever of a low grade. The patient is of a weakly, irritable, nervous temperament, subject to attacks of eczema. Has had catarrh for several years, which at times closes the nasal passages. During the attack of fever there was great delirium. The disordered condition of the bowels was arrested; fever abated; delirium vanished; tongue commenced to clean, when suddenly the patient complained of a burning pain in the bowels. She became restless, and in an hour discharged from the bowels two quarts of black blood, which coagulated in the vessel. She became faint; was covered with a cold sweat; said every thing looked dark. She began, however, under treatment to improve, when she "caught cold." Her catarrhal symptoms became acute. Complained of "pain all over." She then exhibited signs of grave

cerebral paresis. Persisted upon having relief furnished to a man that she supposed was being murdered in an adjoining room. She passed several days, during which time there was free action of the skin; copious discharge from the schneiderian membrane. *Whenever the catarrhal symptoms were aggravated delirium appeared.* Notwithstanding that double pneumonia supervened at a later period, the patient now is convalescent.

In the other case catarrh was accompanied by an expression of excessive pain and soreness in every part of the body. There was paresis of the vaso-motor nerves. The head and face were flushed and hot. Patient imagined himself tangled up among logs and stumps. At other times sleeping in his wood-shed near a hot fire. A thousand fancies filled his brain. In both cases tonics addressed wholly to the vaso-motor nerves produced convalescence.

Want of space will not permit me to detail many cases of great interest.

Mrs. Anderson, of Vevay, Ind., at one time under my observation, suffered from chronic catarrh. There was great prostration of the nervous system; constipation of the bowels; hot head; tongue coated with a heavy whitish brown paste. Her tongue run incessantly. Her mind was destroyed. There was great laxity of the cerebral vessels; ringing of the ears; fullness of the head; slight cough. She died with symptoms of gradual wasting, or inanition. The case passed from my notice a few days before her death, yet the whole course exhibited great prostration of the sympathetic system supplying the brain.

The paresis resulting from *exposure* to heat, is a severe and tedious difficulty to encounter.

In the fall of 1865 I was called to a lady, aged 57, a resident of Portage Co., Ohio, a Mrs. Bluff, who had suffered from sunstroke. She had been under treatment from other physicians for several months, some of whom had administered mercurials, some large doses of quinine, and one, a quack, had poured melted butter in her ears to relieve the ringing, stating that it would remove the cerumen, which caused the annoyance. I found her greatly prostrated—paralysis of the inferior extremities and sphincters. The bowels moved unconsciously in the bed. There was heat and dryness of the skin; head hot; pulse frequent, flashy; nausea and vomiting. There was here evident paresis of the vaso-motor nervous system of the brain; blisters behind the ears. A decoc-

tion of columbo and valerian, iodide potassa, and later strychnia and iron, completed a cure. In five months she was able to walk three miles. In the commencement of her treatment, and for several weeks, no intelligent answer could be obtained to any question. Night and day her constant cry was, "Hark, there the cars are coming. Ah! there they go by. Oh, dear, can any body tell me what to do for my head?" This was constantly repeated.

The effects of cold are but transient, producing anemia and drowsiness.

Debility from disease results in a weakened circulation; a lax condition of the vessels; insomnia; want of mental vigor.

Among other causes may be noticed malarial influences, which impair nutrition, render the brain anemic, and deprive the patient of general vigor.

In drawing our remarks to a close, we add only that cerebral paresis becomes important as an aid in diagnosis, when it is indicative of great permanent loss of functional power in the nervous system. When indicative of either grave anemia or hyperemia, it should excite attention to the organic structure.

In hyperemia we have congestion of the cortical substance of the brain, more frequently accompanied by acute mania. In fevers the depraved fluids circulating through lax vessels, renders the brain torpid, powerless, or in the earlier stages, before the blood becomes so corrupt, relaxation accompanied by delirium. The only organic change is simply loss of vaso-motor power. In some cases the vaso-motor system is too active. The patient lies stupid; sleeps continually. He can be aroused, but falls back again into the same condition.

Place the extremities in hot water. The warmth soothes the irritated nervous system; the vessels relax.

In cases of malarial poisoning the patient frequently lies without sleep, hour after hour. There is great heat of the head; flushed face; eyes congested. Quinine relieves every troublesome symptom. It gives power to the sympathetic system.

In all cases of paresis we will find deficient nutrition. Many grave symptoms depend wholly upon inanition.

ART. III.—Castration for Epilepsy.

DR. E. B. STEVENS: It will be remembered by many of your readers that I performed the operation of double castration for epilepsy in the spring of 1861—(for a full report of this case I refer the reader to the May number of this journal for 1861). My patient made a good recovery, and, that I might be able to note the effect of the operation, I kept him with me for eight months. There never was but one epileptic attack after the operation, and this was on the following night. Previous to this he was attacked every time he masturbated almost every day for eight years. At the time of leaving me he was rapidly improving, mentally and physically.

He entered the army, and served his time out in one of the Indiana regiments. I had not seen this man since leaving me in 1862. I had lost all traces of him for the last four years, until a few days ago, (2d inst.), while attending a political meeting at Indianapolis, I accidentally met "John" who was enjoying himself, and instead of being angry with me for depriving him of his manhood, he was very glad to see me. I stated to him how sharply I had been criticised for the operation, and requested him to call with me on some of the city physicians. He readily consented, and was examined by Drs. Gaston, Todd, Bigelow, Charly Wright and Wm. B. Fletcher.

He stated that previous to the operation "he was not able to do a day's work, owing to general debility and loss of mind;" that he had had attacks of epilepsy almost every day for the past eight years. In short he was an object of charity. At present, with the exception of the "chills," was in the enjoyment of excellent health; that his weight had increased from one hundred and twenty to one hundred and sixty pounds, and that the "nervousness" had all left him; and that he could do as much labor as any man. Is able to read and write; stated that he had but little "passion left for the women." I could not detect any change in his voice. He is glad the operation was performed. His intellect appears as good as any of his class.

These gentlemen are satisfied with the result of the operation. After a thorough examination of the case one of the physicians remarked: "Sir, it has made a *man of you*." While I have my doubts as to this, I am satisfied it restored his health.

I have been informed that last winter one of the Cincinnati

surgeons, while lecturing on the causes and treatment of epilepsy, remarked, "that some few years ago a graduate of this school, and formerly Resident Physician to the Commercial Hospital, had performed the operation of castration for epilepsy, but inasmuch as he has a student attending, he would not mention names."

While I am no advocate for the indiscriminate resort to so serious an operation, I am fully satisfied as to the result of my case, and hope the gentleman in future will give me due credit by mentioning my name to his class.

Probably had he "*manipulated*" matters would have assumed another shape.

It is well understood that epilepsy may originate from centric, or excentric causes, and surgeons, eminent in the profession, have resorted to amputation. Trephining has met with success.

My case is not the only successful one that has been reported in the United States. I have been able to collect seven others, as follows: Dr. McKinsley, of Tennessee, operated twice successfully, (*American Medical Gazette*, July, 1855). Dr. White, of Tennessee, also two. Dr. Talbot, of Missouri, twice; and in one case of Dr. Hacker, of Lousianna. The operation has also been performed successfully in Germany.

Holthouse, Surgeon to the Westminister Hospital, operated on an American in 1859. His case was unsuccessful, and from a careful reading of a history of the case, the operation seemed to have been unjustifiable, (*London Lancet, Reprint*, March, 1859). This case was severely criticised by many of the most eminent English surgeons, and almost unanimously by the American press.

Respectfully,

J. I. ROOKER.

CASTLETON, IND., September 21st, 1868.

ART. IV.—*Medical Chemistry—No. 4.—On the Detection and Estimation of Sugar in the Urine.*

By J. B. HOUGH, M. D., Ridgeville, Ohio.

In cases of diabetes mellitus a convenient and reliable process for the detection and estimation of glucose, is of paramount importance. Though there are said to be occasional periods during

the progress of the disease, during which this body is not present in the urine, yet its detection, *some* time during the complaint, furnishes the best element of a positive diagnosis, while its quantitative determination from time to time, taken in connection with the other symptoms, keeps us informed as to the progress of the disease. There appears to be a disposition on the part of a large mass of the profession to consider a chemical test for sugar as something beyond their power to perform, or as unnecessary trouble. It is neither. Any one can perform the test, both qualitatively and quantitatively, very easily and quickly as this article is intended to show. The copper test first used qualitatively by Trommer and known as *Trommer's Test*, and afterward employed quantitatively by Fehling, is the only one we propose to consider. While many have denounced this test as unreliable, and asserted their inability to find sugar with it, when that substance was *known* to exist, others assert that with them it *never fails*. How are we to reconcile these opposing statements? The first class are those who are either ignorant of the chemistry of the process, or else disregard the conditions essential to success. The second are those who either understand the chemistry involved, or else follow strictly the conditions laid down by some one who understands their rationale. The directions furnished by many of the text-books, though correct, are so *indefinite* as to be understood only by those who do not *need* them. "A small portion of sulphate of copper," "Excess of caustic potash," etc. But how *little* sulphate, or how *much* potash is left to be guessed at. It is proposed to give in this article, after considering briefly the chemistry involved, the process, which the writer uses with uniform convenience and success.

Diabetic sugar is identical with *grape* sugar, called, also, by the French chemists *glucose*. It is composed of an equal number of atoms of carbon, hydrogen and oxygen. Its formula is $C_{12}H_{12}O_{12}$, and its equivalent or atomic weight 180. It differs from cane sugar in composition, by containing the elements of one atom of water in addition to the elements of cane sugar, the formula of the latter being $C_{12}H_{11}O_{11}=171$. Cane sugar is readily convertible into grape sugar by boiling with very dilute sulphuric acid. Nineteen parts by weight of cane sugar will thus yield by conversion, exactly twenty parts of glucose. That we possess a ready means of detecting and estimating this substance, depends upon the property it has of converting two

equivalents of oxide of copper, (2CuO), into one equivalent of sub-oxide, (Cu_2O), by appropriating the other atom of oxygen (O). In order to bring about this reaction, sulphate of copper, (CuO, SO_4), is boiled with a large excess of caustic potash; when if glucose be present, a copper colored precipitate of suboxide of copper is thrown down. If no glucose be present, the precipitate is either not produced at all, or remains of a light green color, or becomes black, according to conditions hereafter to be mentioned. Trommer suggested this reaction as a qualitative test for grape sugar, and so delicately does it respond that the merest traces of glucose are readily revealed, when the proper conditions are observed. But what are these conditions? To comprehend the subject clearly we should note the relative behaviors of normal urine and that of diabetes mellitus, as exhibited by the following comparison of their comportment with reagents:

Normal Urine.

Addition of a small or large amount of solution of sulphate of copper produces a slight light colored precipitate of phosphate of copper, not changed by boiling.

A small portion of sulphate of copper, and a *small* amount of caustic potash, produce a light green precipitate of hydrated oxide of copper insoluble by boiling.

With a small amount of copper solution, and a *large* portion of potash the green precipitate is formed, but soon becomes *black* by boiling, (CuO).

Much copper solution, and much potash gives the green precipitate, not easily blackened by boiling.

All the above *green* precipitates are soluble in *rochelle salts* with or without the aid of heat.

Here, then, we have the rationale of the process as well as the key to success. The amount of sulphate of copper to be used

Diabetic Urine Containing Glucose.

Addition of a small or large amount of solution of sulphate of copper produces a slight light colored precipitate of phosphate of copper, not changed by boiling.

A small portion of sulphate of copper, and a *small* amount of caustic potash, produce a light green precipitate of hydrated oxide of copper, partially or wholly dissolved by boiling.

With a small amount of copper solution, and a *large* portion of potash, the green precipitate is formed, but soon becomes *copper colored* by boiling (Cu_2O).

Much copper solution, and much potash, gives the green precipitate, which is not *all* rendered copper colored, unless *much* sugar be present.

All the above *green* precipitates are soluble in *rochelle salts* with or without the aid of heat

must be *enough* to show a plainly perceptible reaction, and *no more* than the amount of sugar present is capable of converting into a pure copper colored suboxide. The quantity of potash may be indefinitely large, but must not be too small; otherwise the suboxide is not readily formed. Practically, the amount should be three or four times that of the sulphate of copper.

The formulæ given below will be found uniformly satisfactory. The same solutions are used to detect the presence, and also to determine the amount of glucose.

In qualitative testing two cases will naturally arise: 1st. Where the quantity of sugar is sufficient to reveal itself readily by the ordinary process; and 2d, where its amount is supposed to be so excessively small as to require extraordinary precautions in order to insure its discovery. For the first case, all that is necessary is to boil a few drops of the urine with an equal bulk, or less, of the alkaline test liquor; when, if sugar be present, the copper colored precipitate is quickly formed. In the second case, the urine must be concentrated by evaporation, and the proper relative quantities of sulphate of copper, rochelle salts and caustic potash, in their solid form, added. I have not found these precautions necessary, unless the quantity of glucose was less than the one-hundredth part of one per cent.

The smaller the per cent of sugar present, the less of the alkaline test liquor should be used; and when the amount is very small, a considerable increase in the amount of potash will generally assist the reaction.

The quantitative determination of glucose by sulphate of copper depends upon the fact, that one atom of grape sugar will reduce to the form of suboxide ten atoms of the protoxide of copper. Hence, if the equivalent of glucose is 180, and that of sulphate of copper 124.75, it will require exactly 180 grains of glucose to reduce 1247.5 grains of the sulphate. Knowing, then, the exact quantity of the cupric sulphate, which a given amount of solution of glucose will reduce to the red suboxide, the determination of the amount of sugar becomes a question of simple proportion. Wishing to ascertain how nearly these figures would agree with practical results, the following experiments were made:

Into an accurately balanced flask was placed 950 milligrams of pure, dry rock candy. To this was added 40 cubic centimeters of water containing twenty drops of sulphuric acid. The mixture

was then boiled for two hours, keeping up the loss from evaporation by fresh additions of water. The mixture, while hot, was then neutralized with carbonate of soda, and enough water added to make the whole mixture weigh exactly 100 grams. This solution was supposed to contain exactly 1 per cent. of glucose. It measured 98 c. c., and had the sp. gr. 1.020, so that for practical purposes it might be considered a fair substitute for diabetic urine containing 1 per cent. of sugar. In the next place 6.584 grams of normally crystallized sulphate of copper was dissolved in enough water to make up 98 c. c. of solution. Now, if the combining numbers are correct, one measure of the sugar solution will exactly reduce one measure of the copper solution. Trial was then made in the manner hereafter described, and the difference between the result and the numbers above mentioned, were so small as to be fairly attributable to slight error in manipulation, and impurity of the sulphate of copper used. The numbers may, therefore, be accepted as practically correct.

Fehling's method of employing Trommer's Test for quantitative determinations is as follows: "He uses a solution of 40 grams of crystallized sulphate of copper in 160 grams of water. This is mixed with a concentrated solution of 160 grams of tartrate of potash, and 560 grams of a solution of caustic soda, (specific gravity=1.12), and water is then added until the volume of the fluid at + 15° amounts to one litre. 11.5 c. c. of a saccharine solution containing 5 grams of dry grape sugar in a litre, are necessary to cause the perfect reduction of the oxide to the suboxide of copper in 15 c. c. of the test fluid. The urine to be examined for sugar should be diluted with water to ten or twenty times its volume. 10 c. c. of the test fluid are then to be diluted with about 40 c. c. of water, boiled, and so much of the dilute urine, (which must be kept in a burette or graduated tube, in order that we may be able to estimate the quantity used), added to it, as to effect as nearly as possible the complete decomposition of the sugar, and of the oxide of copper. If any undecomposed oxide of copper be contained in the fluid after the removal of the suboxide by filtration, it may be recognized by the blue tint, and by its reaction with sulphuretted hydrogen. If, on the contrary, too much urine be added, the filtered fluid appears yellow from the action of the caustic alkaline on the sugar. As 10 c. c. of the test fluid require 0.0577 of a gram of sugar for the reduction of the oxide of copper contained in them, there must be exactly that

amount of sugar in the quantity of urine used in the experiment, and hence the proportion of sugar in any given quantity of urine may be easily calculated."*

Such is the process generally described in the text-books. For the technical chemist it may do well enough; but for the physician, in the hurry of his professional duties, it is too tedious and roundabout. The test fluid will decompose in a few days, and is then incorrect or useless. The end of the reaction must be determined by frequent filterings or settling, which are tedious and interfere with the accuracy of the result. If physicians had an ever-ready, quick and reliable method, they would use it in many cases where the above would not be attempted. I suggest the following plan, which I have thoroughly tested and found entirely satisfactory as to quickness, convenience and accuracy:

A simple solution of sulphate of copper will keep unchanged for any length of time if kept closely corked. Therefore, my graduated solution contains the sulphate of copper *only*. The other ingredients are added extemporaneously. I determine the end of the reaction in the following manner: A *test paper* is first prepared by dipping slips of filtering paper in a solution of a drachm of ferrocyanide of potassium to an ounce of water. It is hung up until dry, and will then, of course, keep any length of time. A stirring rod, moistened with the copper solution, and touched to this paper, will immediately produce a dark red spot. As the sulphate of copper is gradually decomposed by the sugar and potash, the spot produced becomes paler and paler, and at last can only be seen by holding the paper between the eye and the light. When the end of the reaction is reached, the spot disappears entirely. If the precipitate suboxide adheres to the stirring rod (which, by a little care, need not be the case.) and obscures the color of the test paper, the difficulty is easily remedied by laying a bit of thin filter paper upon the test paper and moistening the latter *through* the former. This test responds with much greater delicacy than it is possible to acquire by observing the color of the liquid. The whole analysis can be thus performed in *ten minutes*; and if a little additional time and care be used, its accuracy may reach to the one-hundredth of one per cent. My process and formulæ are herewith appended, and for the benefit of those who may find the French decimal weights inconvenient, I have given also the corresponding English quantities.

* Lehmann's Phys. Chem., Vol. I., p. 254.

Volumetric Copper Solution.

Crystallized Sulphate of Copper.....	7.072 grams.
Water enough for.....	100 cub. cent.

One c. c. of this solution is exactly decomposed by 1 c. c. of urine of sp. gr. 1.020, containing exactly 1 per cent. by weight of glucose. When required for use, add to 1 c. c. of the copper solution about 2 gram of rochelle salts, and about 3 c. c. liquor potassa of the U. S. P., then add the urine from the burette, a drop or two at a time, boiling after each addition. Whenever the mixture ceases to color the test paper, the number of c. c. of urine used is read off from the burette. The per cent of sugar is found by dividing one by the number of c. c. of urine used. Thus:

If 1 c. c. was used there was.....	1 per cent.
If 3 c. c. was used there was.....	$\frac{1}{3}$ per cent.
If 4 c. c. was used there was.....	$2\frac{1}{5}$ per cent.

It will be observed that if the specific gravity of the urine varies from 1.020, an infinitesimal error in the percentage occurs by this calculation. If thought desirable to avoid so slight an error, it is only necessary to bear in mind that each c. c. of copper solution represents .01 gram of sugar.

If English weights and measures are preferred, use

Sulphate Copper.....	255 grains.
Water enough for.....	5 fluid oz.

In which case one drachm will be equal to one grain of sugar. When used add to each drachm of the copper solution three drachms liquor potassa and twenty grains of rochelle salts.

For qualitative testing the same copper solution is used, with the liquor potassa and rochelle added. In fact, the test may be both qualitative and quantitative at the same time, and the whole operation performed in a test tube over the lamp flame. For this purpose a test tube may be graduated into c. c. or minims, with which a quantitative determination to within one-tenth of one per cent. may be performed in less time than it takes to explain the process.

Translations.

[From the German of PROF. LUDWIG TURK, of Vienna.—BY THOS. C. HENRY, M.D., (late U. S. A.), Cincinnati, Ohio.]

(*Croup—Continued*)—Case No. 15—Tuberculosis of the Lungs, of the Ilium, and of the Glands—Croup of the Larynx, the Trachea and Bronchi, in the case of an Adult—No. 53, Throat Croup.

Voll. Franz, thirty-five years old, of the ward of the first or head physician; Dr. Haller's patient. Sick with tuberculosis, beside croup. Occurred on October 17, 1863, when I had opportunity to examine cases of the above character, being a special occasion, when I made my rounds. The character of the malady was of a severe type. The voice was very hoarse; the phlegm mixed with suppuration, beside being streaked with blood. On the 15th, being previous to this time, the uvula on both sides was covered with a croupose exudation. At eve of the same day, he had coughed up a portion of croup membrane two centimes long, one centime broad and two centimes thick. On the 17th I found, at the time of the foregoing mentioned examination by laryngoscopy, that the palate and sides, and the point of the uvula overspread with a reddish cast in a circle, as it were, within which appeared a yellowish-white consistent croup membrane; also over the posterior side of the soft palate, together with the uvula in a similar way, the cavum naso pharyngeal free from the same up to the mouth of the right tube. The posterior side of the throat, the inner portion of the larynx, even to the rima glottidis, were covered with a croup membrane of similar character, which the free edges of the throat near the arch of the palate, being very angular, removed. The under half of the rima is not observable, from being covered by the exudation. Respiration slow and embarrassed. On the 19th of October he died.

Sectio Cadaveris.

The brain soft, moist, miserably poor, blood streaked. In the interior of the brain a couple of drachms of clear serum. The soft palate, the pharynx, the commencement of the æsophagus,

the entire larynx, the trachea, the two bronchial tubes were covered with a thick croupous exudation, and only in a few places is there any change in the character of the secretion or exudation. In the submucous tissue was serous infiltration curdled, excoriating, and as the pituitous tunicle swelled up through the submucous tissue, infiltrated with serum, the last specially about the epiglottis, the ligamentum ary—epiglottidea and the vocal cords. The chink of the glottis became considerably narrowed. The jugular glands were in a line metamorphized in a large yellow enveloped mass. Both lungs in the posterior portions were with discreet tuberculous pseudo membrane, devoid of blood in the under portions, miserably poor; in their apices inner halves of that portion colored, callous, chalky concretions; in the remaining portion little clustered gray knots, showing lack of air in the parenchyma. Innumerable bronchial ramifications up to four, in order downward, solid portions of fibro-cylinder, appearing like pus in a state of fluidity.

Case No. 16—Croup of the Pharynx, of the Larynx, and of the Trachea and Bronchi—Alectasis of both Lobes of the Lungs—Broncheatasia—Pneumonia—Acute Intumescence of the Bronchial Glands in Case of a Boy.

Anton Ramel, aged sixteen, a mason apprentice, was, on the 10th of December, admitted for treatment. Since about eight days he was affected with pain in the throat, and by exacerbation of symptoms, debility and loss of appetite. Somewhat later he labored under shortness of breath, and at about four days later hoarseness came on. On the 11th of December, there was apparent, on the right side of the soft palate and in the right tonsil, an extensive thick membrane, incomplete but firmly fixed, white-covered, and under which, on the upper segment of the right tonsil, more to the left, a layer of thicker, deeper substance was observed. At both soft palates, arch, and the left side of the glottis, a little uniform, thin covering, of which, also, there was some under the pharynx, were spread out upward. A pair of larger ones were on the further side of the throat (or of the buccal membrane); one at the front near abraded surface of the two, and still another observable between the two true right vocal chords. A proof still more evident was evinced, from the fact that it was observed in the front portion of the under half of the vocal chords. Occurrence of rattlings under the thorax, in

particular in the left lobe of lung. Pulse one hundred and eight. I ordered four to five applications of cauterization to the throat, as also to the interior of larynx, with a solution of one drachm Nitrate Argent to one ounce distilled water, with my Schwamm's porte caustique.

By means of the herein alluded to laryngoscopic observation was shown the entire interior of the larynx, over one-half of the true vocal chords, and also the upper surface of within left a whitish appearance from the application of the caustic overspread. The first violent onset of pain was greatly assuaged by the caustic application. The same evening aphonia occurred. On the 12th the pulse fell to eighty-four. On the 13th the sputa were mixed with blood; aphonia occurred—it was in the night—violent dispnea came on. Rattling in the posterior part of the thorax had been alluded to. Respiration thirty-four to thirty-six. The progress of the disease caused death about five o'clock in the evening.

Section.

The pituitary tunicle of the pharynx was clotted or in grains, and some particles of the same elsewhere, and large grained, with all the secretion in this shape—broken down, degenerate. Ulceration of the tonsils, covered with a brownish croupous exudation, which, also, with the extremely thickened secretion from the larynx, and of the other air-passages in particular, was noticed. The end of the right tonsil was, beside rounded, enveloped with large kernels of decaying tissue, surrounding an aperture extending, it may be, one and a half centimes long, sinus, with which it connected.

The pituitous tunicle of the entire trachea and of the bronchi were covered with numerous small ecchymoses. The bronchi, and especially the two lobes of the upper part of the lungs were expanded in their superficies of their ramifying vessels. The parynchema of the lobes of the lung on the left side was emaciated; thickened, emaciated, puffed up. The left and under lobe, moderately filled with blood, appeared frothy (Edematous), the right and its extremity also containing air, the under portion of the right lobe containing no air, tissue blood-red, and many spotted, blistered, colored, oozing unevenly from the abraded sides, of which the granulations were, for the most part, of the size of beans, crowded together and devoid of air.

Case No. 17—Croup of Larynx—Tracheotomy—Death—Croup of Trachea and Bronchi—Extensive Hippatization of Lungs.

Gisela Tuchs, aged nine, daughter, a waiter, was the subject of this article, April 16, 1865. For five days affected with dizziness, pain in the head, faintness, increased thirst. Some hoarseness showed at the time of her reception, a pulse of one hundred and thirty, and considerable rattling in the entire thorax. Afterward signs of fever lessened; she showed signs of very severe hoarseness. Augmented rales over the entire thorax on the 26th; pain from an aggravation of symptoms, and upon pressure over the throat and in the larynx. Moreover, the fauces were somewhat stiffened. Pulse ninety-six. On the 27th, she exhibited proofs of a collection of phlegm in the hinder posterior portion of the throat. Early on the 28th of February, a violent dispneal attack with cyanosis; the entire further side of the throat exhibited a thick croup membrane, covering it at the free margin with a tolerably acute edge, reddish in color, bordering the limits of the exudation, lifting off the free front portion of the epiglottis. A similar covering exhibited itself on the inner face of the aryepiglottic folds: by a repeated examination was found to be so, and the hinder and the sidewise ligaments, as also the tonsils, were only, to a certain extent, inclosed in a thick envelope, visibly. It was advised to cauterize the throat and interior of the larynx in the onset with a solution of one drachm Nitrate Argent to three drachms distilled water, by the Schwamm's Prize Injector. By two applications of caustic through the above means the croup membrane can usually be removed mechanically.

During the afternoon were the cases of this character, and this among them, of Dumriecher's ward, removed elsewhere for the purpose of having the operation of tracheotomy performed, an operation previously alluded to, by which the trachea and croup membrane are cut through and a canula introduced into the opening. On the 6th of March death ensued.

Section of the Cadaver—Appearances.

The inside of the top of the brain was infiltrated with serum. The pituitous tunic of the pharynx, the larynx and the trachea, also the bronchi, stuffed with concreted phlegm, with only little flakes; that of the larynx, pharynx and the greater bronchi with one uninterrupted croup membrane, flecked in many places with

a kind of spots, as appeared. In the neighborhood of the glottis, so also in the under and hinder part of the epiglottis, was located croup membrane considerably thick. In the small branches of the bronchi there was one in which air-bubbles were located, resembling pus in a fluid state. A portion of the right under lobe, with a fibrous membrane over it, in the region of the right breast, something like an ounce of matter exuded. The tip of the right lung and its margin, and the entire left lung, with the exception of the posterior portion of its lobes, moderately abounding in blood, œlematous in the under parts in both lungs were numerous bodies like large beans; in the interlobular spaces gray, redish spots and yellow hepatized; also, some little air found present in the interspaces. The spleen small, brown, tenacious. The pituitary tunicle of the ilium slightly injected.

Secondary Croup.

This comes often and at the close of the exanthematous process of typhus, of cholera typhoid, of pyaemia, and often, also with other exudations of the inter al canals, viz., pneumonia, pleuritis, bronchitis, meningitis, combined, also pericarditis. (Rokitansky). With secondary croup the membrane is frequently thinner than in primary croup, so that is repeated only in skin-flushed representation, though sometimes thicker, and more solid membrane is found a corrosion by croup. The exanthem is always exhibited with an epidemic. Often one can, by a laryngeal examination, fail to acquaint himself fully with its *modus operandi*, and his reputation also be disadvantaged.

In measles, croup appears very often in the prodome of it, mostly first at the eruption, accidentally, about the sixth day of the disease; particularly very low in the throat, then going up higher.

In scarlet fever, croup attacks the tonsils and the arch of the palate downward, and extends itself and in the same case beyond the trachea and bronchi. Besides, it obtains a still greater extension to the nostrils, and its peculiar secretion to the lips, and excoriates spots higher beyond.

In small-pox, one meets frequently with croup in the throat, a fact I have ascertained by examination of the cadaver affected with variola (a painter), the exudation extending under the side of the naso-mastoid space. Croup of the larynx can extend as far as the bronchi. It has a peculiar signification. In two cases,

to my knowledge, there happened to be, at the same time, œdema of the glottis, which, of course, proved fatal.

The first case happened in one of seventeen years of age, a journeyman locksmith, J. Scharnaggel. At that time I was with my tutor, Dr. Neumann, then second in the division for severe diseases of a contagious character, eruptive, specially variola hemorrhagica. On February 28, 1861, on the sixth day of sickness, about ten o'clock in the morning, at the same time having a quiet pulse and perfect consciousness—in the case of this patient—he was suddenly affected with severe hoarseness; there seemed to be an inflammation of the larynx. Within one and a half hour death followed, with appearance of suffocation.

By means of examination I ascertained that the surface of the tongue and the free margin of the throat were covered with a tolerably thick, though numerous minute points of hemorrhage, there being effused over all discolored croupose exudation. The hinder portion of the throat, with the exception of one spot, a few lines wide, was free from exudation. The exudation, where it existed, was much concreted. There was also intense œdema about the false and true vocal chords, and on that account a higher grade of stenosis of the rima glottidis.

The second case occurred in the person of a twelve-year old civil officer's daughter, Augusta Sp—. She died in spite of the means employed by Dr. N. on the thirteenth day of sickness, before the eruption was well developed. From the condition found upon investigation it would seem singular death had not occurred before. I found the largest portion of the larynx posteriorly, with the exception of the lobes, of a thinner croup membrane spread over a segment of the commencement of the trachea appearing through, on the true and false vocal chords, the exuded substance having gushed through the œdematos parts.

In typhus, so, also, in exanthematous diseases and those not exanthematous, larynx croup comes in earlier—in both the earlier and later stage. It is, however, less violent in the latter case.

The following observations that I make are to the purpose:

In Pyemia.—On the 8th of ——, with indications of peritonitis, a woman lying in, Christina Ob, aged twenty years, a servant, became affected with huskiness of voice, which passed into aphonia. On the 24th the tenderness in the region of the pomum adami was very evident, the pain being of a dull character (not

lancinating), and referred to the deeper part. On the 27th heavy breathing. On the 28th, at eight o'clock A. M., she died.

The sectio cadaveris showed that between the rectum and the posterior ligament of the uterus and ligamentum tatum, bending the tissue in the region, where an abscess was found, the uterus itself degenerated with fat. The greater portion of the interior of the larynx and a portion of the trachea constricted, yet entire. Croup membrane diffused over all; pituitous tunicle clotted; excoriated portions appearing; here and there hypostasis of both lobes of lungs.

In Morbus Brighti larynx croup forms. I once had a chance to observe such. Also exudation poured out in the internal canals, such as diphtheritic dysentery, where the membrane has been also found in the throat by laryngoscopy.

Case No. 18—Slight Throat Croup with Variola.

Leopoldine Klein, eleven years old, was, on the 7th of April, 1865, (having been an invalid fourteen days), affected with numerous variolous pustules over the body; almost entire. About the period named her voice became husky, but soon seemed to lessen in intensity, and she coughed up a quantity of slime and mucus. By laryngoscopic examination I found the upper surface of the true and false vocal chords perfect; the freed surface of upper surface of the throat denuded; also, in the posterior side of the larynx large portions overspread with a foul white, and shreds of membrane hanging to the sides of the throat. The lowest parts were not seen. About the soft palate the exudation appeared whiter. On the 20th of May the disease had disappeared from the hospital.

Case No. 19—Secondary Croup of the Throat in Typhus.

A case of a woman, about thirty years old, named Bakers, was left by her physicians between the third and fourth week of typhus, being nearly over her sickness. At that time she began to complain of strangling and of a tenacious phlegm in her throat, may be of three or four days' growth, while her pulse stood at one hundred and eight. By January 29, 1862, I made the examination with result as follows. I found well back in the throat, near the glottis, and to the right side, the presence of a thick, extended croup membrane, which was on the posterior surface of the soft palate, and extended in quantity that the

margins of the arch of the palate and of the glottis were reached. The freed edge of the epiglottis and part of the right aryepiglottic fold, the cartilages of Weisberg and of Santorini were covered with the common membrane. The vocal chords normal. Under the exudation nothing of consequence was arrived at.

Case No. 20—Slight Attack of Throat Croup with Morbus Brighti.

Regina Berger, aged seventeen years, maid, who had suffered many months with Bright's disease, being in my ward, was seized, March, 1862, with hoarseness and pain in the larynx. At about the 4th of March, I made a laryngoscopic examination. There was a moderate degree of redness of the glottis and inner surface of the larynx as far as could be seen. Erosion of the vocal chord and its vicinity. One-half of the inferior portion of the glottis was covered with clotted or granulated secretion, and the front of larynx in part. On the 9th of April death occurred.

By a *post-mortem* made, the following condition of parts are here stated:

The slime and matter clotted in the interior of the larynx was profuse, and the most remarkable appearance of the croup membrane as to shape, being in such a form as to suggest the form of a miter.

Hospital Reports.

CINCINNATI HOSPITAL.

Typhoid Fever, Connected with Organic Disease of Kidneys.

Medical Clinic of C. G. COMEGYS, M. D., Professor of Institutes of Medicine and Clinical Medicines, Ohio Medical College.

Reported by M. B. KELLAR, M. D., Assistant Resident Physician.

Daniel McD—, aged thirty, admitted to surgical ward, October 8, 1868, to be treated for stricture of urethra of four years' standing, the sequel of an old clap. The Surgeon, upon making his morning visit, found him so much prostrated that it was impossible to do anything for his stricture until his general health was very much improved, and he ordered him transferred to the medical ward for treatment.

The patient states that for the last two weeks he has been troubled, off and on, with soreness of limbs, wandering pains in back, headache, a sense of fatigue with anorexia, thirst, epistaxis and diarrhea, with marked and rapid emaciation. Difficult micturition, with incontinence of urine when asleep.

Condition on Admission.—Small in stature, thin in flesh and very much prostrated. *Dorsal decubitus.* Expression dull; cheeks are flushed; eyes are sunken and surrounded by a dark areolo, and his nose is pinched, with a few sordes on lips and teeth. His mind is clear; temperature of body 105° F.; pulse 100, small and compressible; tongue moist, red at tip and edges; normal in center and base; respiration 18 per minute; appetite poor; considerable thirst. We obtained a small quantity of his urine, which was acid in reaction, S. G. 1019, of high color, but contained neither blood or albumen. No intra-thoracic lesions detected. Abdomen very tympanitic, but no gurgling or tenderness in right iliac fossa, and no rose spots. Liver and spleen apparently normal. The penis is small and phymosed with general glandular enlargements. Was ordered *Liq. Ammonia Acet.* $\frac{5}{8}$ ss, every two or three hours with beef essence.

11th, 8 A. M. Very restless; some little delirium; temperature 102° F.; pulse 94, small and weak; gurgling and tenderness in right iliac fossa. No sore spots; continue treatment. At $5\frac{1}{2}$ P. M. Temperature 105° ; pulse 100; respiration 24.

12th, 8 A. M. Rested better; no delirium; five ocher-colored stools; more prostr. ted; tongue red and dry; pulse 104, weak and irregular; temperature $102\frac{1}{2}$; respiration 22. A few rose spots on belly; urine now constantly dribbles from him, making his bed uncomfortable and the atmosphere of the ward offensive; was ordered a rubber urinal. At $5\frac{1}{4}$ P. M. Temperature $103\frac{1}{2}$; pulse 94; respiration 20.

13th, 8 A. M. Much worse this morning; rolls from side to side in his bed; has *subsultus tendinum*; expression is hypocratic; extremities are cold; tongue is glazed; sordes thick; pulse 56, and feeble; temperature only 96° ; respiration 24. Dr. Comegys attributed these untoward symptoms to uremic poisoning, and ordered him accordingly a diuretic for the purpose of stimulating the kidneys to increased action, so as, if possible, to get rid of the excess of urea retained in the blood. He ordered him his favorite diuretic, and one which acts promptly as well as kindly:

R.—Liq. Ammonia Acet., $\frac{3}{5}$ iss.

Tinet. Digitalis.

Spir. Ether Nitros, aa $\frac{3}{5}$ ij.

M.—Sig. $\frac{3}{5}$ ss every two or three hours.

Also Carb. Ammonia, grs. viiss, and Brandy, $\frac{3}{5}$ ss, every two hours, with beef essence and milk. To apply hot bricks from axilla to feet. In seven hours after the above treatment was instituted his extremities grew warm, his skin moist, his pulse rose to 72, with considerable force and volume. Temperature $100\frac{1}{2}^{\circ}$, with the appearance of two or three *rose spots* on belly.

14th, 8 $\frac{1}{2}$ A. M. Slept a few hours; diarrhea still continues; vomited several times during the night; annoyed by times with hiccoughs; is rather restless. Continue treatment. At 5 P. M. Temperature $104\frac{1}{2}^{\circ}$; pulse 80, respiration 22.

15th, 8 A. M. Very restless; expression hypocratic; skin is hot and dry; temperature 105° , with a pulse of 100, small and quick; tongue still red and glazed; sordes are thick on teeth and lips. The diuretic, as well as the Carb. Ammonia, were discontinued, and ij grs. of Quinine was substituted every three hours, with his brandy and beef essence. At 5 P. M. Temperature 105° ; pulse 100; respiration 24.

16th, 8 A. M. Upper extremities bathed in cold, clammy sweat; lower extremities cold; has involuntary discharges in bed; urine is very scant and bloody. Stomach is very irritable; refuses both food and medicine; abdomen very tympanitic; rose spots have vanished. Hiccup has resisted valerian, chloroform and musk. Was ordered $\frac{1}{6}$ gr. of Sulp. Atropia, to be given subcutaneously back of neck, which controlled the singaltus until food or medicine was taken, when it would return. Temperature $100\frac{1}{2}^{\circ}$; pulse 80; respiration 22. To apply hot bricks to body, and to have Carb. Ammonia and Brandy freely. At 8 P. M. Temperature $101\frac{1}{2}^{\circ}$; pulse 70; respiration 22.

17th, 9 A. M. Is sinking; no amelioration of his symptoms. To continue treatment.

18th, 5 P. M. Hiccup, vomiting and diarrhea still continue. Extremities are cold; respiration 36; pulse frequent, small and intermittent; temperature $97\frac{1}{2}^{\circ}$. Stomach retains nothing. At 8 P. M. Temperature 98° ; pulse 60; respiration 24.

19th. Died.

Autopsy, sixteen hours after death, by Dr. Bartholow, Patholo-

gist of Hospital. Lungs and heart were found normal. Liver and spleen considerably enlarged, and their structure somewhat softer than natural. The intestines contained but little gas. Peyer's patches were simply congested, no evidence of inflammation or ulceration as having occurred during the patient's illness. The penis and bladder were removed entire. The penis was phymosed. A stricture was discovered anterior to the triangular ligament, the fibrous bands encircling the whole of the canal, diminishing its caliber to such an extent that it barely admitted the end of a small probe. The bladder was contracted and very much thickened. The ureters were dilated, long and tortuous. The right kidney and pelvis were found converted into a large sac, measuring seven and a half inches long and nine and a quarter inches broad; surface of sac was smooth, and when opened it was found to contain six or eight ounces of fluid resembling pus. The renal structure was almost completely destroyed. The left kidney was not so large, nor the destruction of tissue so extensive. Its external surface was granular, presenting, here and there, points of fluctuation; on cutting open the organ it was found extensively sacculated and full of pus. The mucous membrane of the pelvis was much thickened. Right kidney weighed xvij oz., the left xivss oz.

REMARKS.

The above account is an exact transcript of the daily entry from the ward case book.

Prof. Comegys first saw the case on the 11th instant, at which time there was tenderness and gurgling in the right iliac fossa, with mild delirium, which added to the symptoms described on his admission, led him to make a diagnosis of simple typhoid fever, which seemed confirmed on the following day by the appearance of rose spots and the thin, ocher stools. The temperature also ranging in the typhoid line.

No examination of urine could be had after the first day on account of its dribbling away.

On visiting the ward on the 13th instant, and found that the temperature had sunk from $103\frac{1}{2}^{\circ}$ to 96° , with the pulse at 56, the Doctor, at once, declared that there was suppression of urine, and that the remarkable change in the whole aspect of the case was due to the retention of the urinary constituents in the blood,

and prescribed the above. The result was a reaction during the day.

On the 14th, the regular clinic day, he was brought before the class and presented as a case of typhoid fever, having all the rational and physical signs of the disease, complicated with grave symptoms of uremia, which was attributed to the suppression of as a condition, in some way connected with the stricture of urine the urethra, but the bladder, on percussion, showed no urine.

Particular attention was directed to the additional blood poisoning, by indication furnished by the thermometer, and the altered pulse; the body-heat not only declining $7\frac{1}{2}^{\circ}$ in a few hours, but 2° below normal standard, and the pulse falling from 96 to 56 per minute, while the respirations were 24, showing no longer the correlation that is so often observed between these functions.

On the next day, the 15th, his temperature rose again to 105° , then gradually sunk away down to $97\frac{3}{4}^{\circ}$. On the morning of the 18th, notwithstanding all the efforts which were made to raise the temperature of body, on the 19th instant he expired.

The case is presented to show how the usual phenomena of true typhoid fever, such as prostration, epistaxis, a tongue red at tip and edges, thirst, anorexia, diarrhea, tympanitis, gurgling and tenderness in right iliac fossa, sore spots, high range of temperature, frequent and feeble pulse, subsultus, mild delirium or hebetude of mind are due, also, to a blood poisoning from retaining urinary constituents, and the destruction changes in the kidneys themselves.

The appearance of blood in the urine voided fully indicated to us the structural lesions of the urinary organs, but was considered a mere complication of the typhoid fever, and related to the effect of the stricture of the urethra rather than the basis of the whole phenomena.

On the 16th inst. the hiccoughs became so distressing, resisting valerian, chloroform, musk, etc., that the Doctor ordered the use of Sulph. Atropia to be given subcutaneously, which completely controlled the singaltus.

Fracture of Leg and Thigh.—Removal of Deformity Resulting from the Former.

Surgical Clinic of W. W. DAWSON, M. D.

Reported By A. GUTHRIE, M. D., Resident Physician.

I bring this patient before you, gentlemen, this morning, for two purposes: First, to show you the treatment in case of fracture of the thigh; and second, to illustrate how a deformity resulting from an oblique fracture of the tibia was removed. This patient was treated in this house, during the past spring, for an oblique fracture of the right leg, and four weeks ago he was admitted for the same kind of fracture of the corresponding thigh. The plan adopted for the latter was simple: a long external and a short internal splint were applied; extension was made by a weight and pulley. The best arrangement for extension is by adhesive straps extending the entire length of the leg. These should be kept in place by transverse bands of the same material, or by a roller. The second and most interesting point in this case, is the relief of a deformity resulting from the fracture of the leg. The great damage to the soft parts of the limb, the extreme obliquity of the fracture, the powerful contraction of the Tendo Achilles, and the near proximity of the injury to the ankle, rendered it impossible to prevent the upper fragment from overriding the lower one. The bones united in this position, and left a sharp and abruptly terminating ridge, presenting beneath, and pressing against the skin. *During the tenth week I exposed this protruding portion, and removed it with the chisel.* The cicatrix which you see here, shows the line of incision, and shows, also, that the deformity has been entirely removed.

A word of caution here may not be out of place. When you are called to such a case as this, let your patient understand at once that you do not promise a perfect limb; that there may be deformity and shortening; that you will do all that surgery furnishes; and that with this promise, and this assurance, you will undertake the case.

MacCormac's Flap.—Amputation of the Thigh.

This patient, a colored man, twenty-one years of age, has, as you see, an enlarged knee-joint, the result of a synovitis, which attacked him eight months ago. The syphilitic character of the disease is without question. The joint is greatly swollen, and

through the sinuses, the femur, and the tibia are found to be carious and soft. The intense pain, and the free discharge from the openings, which you see upon and around the joint, have worn this poor man to a mere skeleton. Shall we excise the knee; or amputate the limb? or shall we, without interference, allow this patient to be tortured by this disease to his death?

Upon the subject of interference we may say, that in his present condition he has not one ray of hope for his life. He can not survive one month, probably not one week. The knife gives him a chance, a slight one it is true, but it is still a chance, and I think the surgeon is always justified in operating under such circumstances.

The question then comes up between excision and amputation. There are two reasons why we can not resort to the former: 1st. The disease involves so much of the femur and tibia, that were we to remove the whole of the affected bone, the leg would be so shortened as to be useless. 2d. The patient is now so worn and wasted that it would be hardly possible for him to bear the protracted confinement, and the long continued drain which necessarily follows excision of the knee. Amputation, then, is left to us, and I propose to make a flap after the method suggested by Dr. Wm. MacCormac in the August, 1868, number of the *Dublin Quarterly Journal of Medical Science*.

I make, as you see, by cutting from without inward, a long anterior flap, and by transfixion a short posterior one. I divide the bone, and bring the flaps together. The line of union is on the posterior aspect. It is a modification of Teale's octangular flap. This operation makes a handsome stump. The advantages claimed for it are, sacrifice of less bone, a smaller cut surface; "the line of junction is at the most dependent part, but not underneath the stump, as in Teale's, where it must be subjected to pressure; no tendency to protrusion of bone, or to a conical stump. The end of the bone is covered with a thick cushion."

Excision of Metatarsal Bone of Great Toe.

This patient, twenty months ago, fell down a flight of stairs and bruised the side of his foot. The inflammation which followed involved the first phalanx and distal end of the metatarsal bone of the great toe. The diseased bones were removed some months ago, but the caries afterward attacked the remaining portion of the metatarsal bone. I amputate first the great toe, then dissect

out what is left of the metatarsal, and to give symmetry to the foot I take off a portion of the internal cuneiform. The wound will be closed by sutures supported by adhesive straps, and as the vitality is low, dry dressings will be applied.

Inversion of Toe-Nail.—Richardson's Spray.

For several months the patient before you has suffered from inversion of the nail of the great toe. Both edges of the nail are in this abnormal condition, pressing upon the tissues at the sides of the toe. They have produced ulceration, and give great pain. The parts are exceedingly sensitive, and without some anaesthetic the operation for relief would be exceedingly painful. Ether spray from Richardson's apparatus, applied for a few moments, renders the parts entirely insensible, and I now remove one-third of the nail on either side by dividing first with the knife, and then dragging the fragments out with a pair of forceps. *It is only for insignificant operations, like this one, that the Spray is of any value. It is worse than useless when much cutting is to be done.*

Wound of the Abdomen.

One week ago this young man, aged twenty-five, in fair health, was stabbed in the abdomen. He was brought to this hospital for treatment on the following day. The wound is, as you see, in the left wall, midway between the umbilicus and middle of Poupart's ligament. He seemed to be progressing favorably, until three days ago, when he was seized with a rigor, followed by fever, hard pulse, and pain in and around the wound. He was placed on one grain of opium every two hours, and this morning his grave symptoms are very much ameliorated, and his chances for recovery good. Pus formed in the abdominal parieties; has been escaping from the wound for the last forty-eight hours. *Opium is the great remedy in threatened or developed peritonitis.*

A wound of the abdomen should always elicit the most watchful care on the part of the surgeon. If it be a simple incision without penetration, the recovery will be sure and speedy. If, however, the cavity be opened, then the case becomes one of serious import. *Time, and not the probe, must determine the grade of the wound.*

What are the rules which should govern you in wounds of this cavity?

The constitutional remedy, the sheet anchor, in these cases, has already been alluded to.

If you have protrusion of the bowels or omentum return it, if it be not damaged seriously by violence or gangrene. Should the rent be not sufficient to permit the easy replacement of the protruding portion, enlarge it.

If you have no external or internal hemorrhage, close the wound at once with interrupted suture; but if you have the former, be cautious how you apply your means for its arrest, as you may direct the current into the peritoneal cavity. When you are satisfied that the bleeding is internal, enlarge the wound and secure the vessel.

Ophthalmological Department.

EDITED BY E. WILLIAMS, M. D.

Curbolic Acid in Hypopoin Keratitis and other Corneal Affections.

BY A. D. WILLIAMS, M. D., Cincinnati.

I report the first two cases treated by the acid in detail, in order to show its action, and the general indication for its use.

CASE FIRST.—Dudly, colored man, very stout, day laborer, and about thirty-five years old, came to the office last summer suffering most intensely. Could not stand, lie, nor sit, on account of the intense pain. Said that two weeks previously his eye began to pain him suddenly, and increasing in severity, continued up to the time he presented himself. Had not been able to sleep for that length of time more than just a moment at once. Upon examination I found that about one-fourth of the inner part of the left cornea was the seat of a *phagedenic ulcer*. Its margins were irregular and undermined. The cornea adjacent to it showing a white or gray infiltration, which was a sure evidence that the phagedenic ulceration was progressive. Apparently, the corneal tissue beneath the epithelium had been destroyed by the ulcerative process first, and that the epithelium had sunken or folded

itself inward, thus giving rise to the *undermined* appearance, as in phagedenic ulcers in other parts.

Evidently, the epithelium of the cornea resists the ulcerative process longer than the tissue beneath it. The superficial lamina had been completely destroyed within the area of the ulcer, and apparently to a certain fixed depth, as the bottom of the ulcer seemed to be very even. From its depth I judge that at least one-fourth of the thickness of the cornea was eaten away. As would naturally be inferred from what I have said, a small amount of pus was visible in the anterior chamber, technically called hypopion. This, together with the corneal affection, which is the cause of the hypopion, gives to the disease its characteristic name, Hypopion Keratitis, which was the diagnosis in the case now under consideration.

According to former experience in such cases, the prognosis was unfavorable. The ulcerative process would probably involve the entire cornea, and thus render it useless for sight. The old treatment was first ordered, which consisted in the energetic use of atropine locally, and large opiates internally, with the use of warm fomentations to the eye, particularly warm water. Two days later the ulceration was going on: the pupil moderately dilated; the hypopion increasing; the suffering not in the least relieved. Made hypodermic injection, and continued other treatment. The following day the ulceration was still extending, and, of course, the hypopion was proportionately increased—now the chamber was about one-half full. The injection of morphine had given only temporary relief. The patient did not sleep any the night following.

On account of the large amount of pus in the anterior chamber, I made a paracentesis cornea downward, and let the matter out. Continued opium, atropine and warm fomentations. The following morning returned: was easy for several hours after the pus had been evacuated; had not slept any, however, and was suffering as much as ever. The ulcerative process was gradually undermining the corneal tissue. The hypopion had begun to make its appearance again. Now, more than ever, was it evident that the eye would be totally lost, if the ulceration could not be checked.

Looking upon the progressive ulceration as a *progressive suppuration*, or perhaps more properly, *aggressive suppuration* of the corneal tissue, by which I mean to say that the pus formed is ex-

clusively at the *expense* of the corneal tissue, and hence I call it *aggressive*, for the cornea is being constantly invaded and destroyed. It is well known that an ulcer in other parts of the body may suppurate for weeks and months, and not involve or destroy any healthy tissue. There the pus is not formed at the expense of any tissue, but is simply a secretion from the surrounding parts. In corneal *progressive* ulceration, which I prefer to call *aggressive suppuration*, it is very different. The pus is always at the expense of that peculiar tissue. Considering, then, the ulcerative process in the case before us as essentially *suppurative*, and knowing the wide spread reputation of *carbolic acid* to prevent or check suppuration, I concluded to try its effects upon this black man's eye, and see if it would check and control the suppurative *tendency* of the cornea. I have every reason to be well satisfied, and, in fact, delighted with the result.

I ordered fifteen grains of the acid to half an ounce of glycerine, dipped a probe into it, on the end of which a very small quantity adhered, and touched it upon the ulcerated surface of the cornea. It spread over the ulcerated surface instantly, and turned it white by coagulating the albumen of the secretions. The patient almost screamed from the smarting at first, but it did not last longer than from five to ten seconds. It passed off almost instantly, and the patient felt easier. (It will be remembered that the eye was intensely painful before its application). This was in the evening. Directed atropine to be continued. Next morning I was surprised to learn that the patient had not had the least pain since he left the office the evening before. Had slept well, which he had not done for near three weeks before. Thought he was nearly well, from the fact that he had got one night's rest. Could raise his head, and open the eye better. The eye was decidedly improved in appearance. The hypopion had diminished; a part of the margins of ulcer did not present the line of gray infiltration in the adjacent cornea. Touched the ulcer again as at first. Continued atropine. In the evening was still improving. Used the carbolic acid in the same way.

Next morning was still improving. Had had no pain, and slept well. A large portion of the margin of the ulcer had ceased to present its usual ragged appearance. Had become smooth, and did not show the characteristic infiltration. The treatment was continued twice a day for four or five days, when the patient thought he was well enough to remain out of treatment over

Sunday. On Monday morning complained of having a little pain. At one point, in margin of ulcer, the infiltration had increased very slightly, also a mere trace of hypopion was visible. Applied the medicine as before, but scratched this one point a little with the end of the probe, so as to bring the acid down to the bottom of the infiltration. By evening the fresh trouble, together with pus in anterior chamber, had disappeared. No more pain. From this on the acid was applied twice a day, and the atropine three times. The edges of the ulcer soon became smooth, and its bottom rapidly filled up so that the loss of tissue was soon replaced. The recovery was so rapid, that in ten days from the beginning of the acid treatment the man returned to his manual labor. About two weeks later I saw him, and his eye was perfectly well. The opacity of the cornea was surprisingly small for the extent and depth of the ulcer.

CASE SECOND.—Martin M—, aged thirty-nine, healthy German, stone cutter. Several weeks ago a piece of stone struck him on his left eye. It reddened his eye for twenty-four hours, but he continued to work.

Ten days ago fell asleep, Sunday afternoon, and waked up with pain in left eye. This increased constantly till it became almost intolerable. Eye became very red.

Next day consulted his family physician. Got medicine, but it did not relieve his suffering. Afterward consulted a quack, and suffered still more in consequence. Then came to our office suffering intensely. Had not slept for ten days more than a moment at a time. Complained mostly of whole left side of head.

August 2d. *Status Præsens.*—Eye red and weeping. Patient can not open it and look up on account of the light. About one-fourth of the inner part of the cornea is the seat of a phagedenic ulcer, (probably traumatic), which has eaten away about one-fourth of the thickness of the cornea. Its margins are irregular, and decidedly undermined. Beneath the undermined edges is a considerable collection of pus. The anterior chamber is partly filled with it, temporarily obstructing the vision. The diagnosis, for the reasons given in case first, is *Hypopion Keratitis*, exactly similar to case first, except in its origin. This is *traumatic*; the other was *idiopathic*. The prognosis, if the old treatment is adopted, is decidedly unfavorable. If the carbolic acid is used, and it does as well as it did in case first, it is more favorable. Under the former treatment the ulceration will probably extend till it in-

volves the whole cornea. The carbolic acid treatment may check this ulcerative process, and save some useful vision. At first the old treatment was ordered, which consisted in atropine locally, anodynes combined with quinine internally, and warm applications to the eye, if they are comfortable. This treatment was continued for twenty-four hours.

August 3d. Could not sleep. Pain not even palliated. Ulcer extending. Pus in anterior chamber increasing. Dipped a probe into pure liquid carbolic acid, to which a very small drop of the acid adhered. This I touched to the ulcer, and allowed it to spread over its surface. It burnt intensely for a few seconds, and then ceased entirely.

The patient lifted up his head immediately, and opened his eye, declaring that the light did not hurt him so much, and that the pain had ceased. The acid turned the surface of the ulcer white by coagulating the secretions. Stopped the anodynes, and continued atropine.

5 P. M. Has no pain, and has had none since the use of acid this morning. Still opens the eye better, and the light not so painful. I now apply the acid solution, (thirty grains to an ounce of glycerine), as in case first. Smarts sharply, but soon ceases. Continue atropine.

From this time on the carbolic acid solution was used twice a day, always trying, as much as possible, to confine the medicine to the area of the ulcer, and particularly to its margins, and to those points in the margins where the infiltration would show itself most.

The eye did well for about one week, when, at one point, the ulcerative process suddenly increased, and extended rapidly in one direction. The hypopion increased rapidly also. There had been considerable pus in the anterior chamber all the time, which was being slowly absorbed. The increased ulceration was not attended with any increase of pain.

At this juncture I made a paracentesis cornea in the bottom of the ulcer. In my efforts to get all the pus out, a small portion of the iris prolapsed and remained in the wound. I cleansed the point where the ulceration was advancing thoroughly, and reapplied the carbolic acid solution; to keep the eye gently bandaged, and to use the atropine.

Next day eye little better. No pain. Used the thirty grains solution only once a day from this on. Ordered five drops

of the fluid carbolic acid to the ounce of glycerine, to be dropped into the eye every hour during the day. The eye gradually improved; the surface of ulcer became clean and smooth. After four or five days the weak acid solution was used less frequently, and gradually discontinued as the ulcer healed. As soon as there ceased to be any sudden break in the substance of the cornea, at the margins of the ulcer, the strong acid solution was stopped. Atropine used regularly.

September 12th. Eye looks well; a little red around the margin of the cornea. Ulcer healed. Has been some iritis, which has caused some adhesions. Opacity of cornea surprisingly small; a part of it transparent. Vision pretty good. Synechia posterior interferes with it somewhat. Good prospect for an iridectomy. Patient has permission to begin to do light work; to keep the eye shaded.

September 18th. Patient has been cutting stone three days. Eye still improving. Slight opacity of lens, which, I think, was caused by a little of the acid getting into the anterior chamber after the cornea was punctured. Atropine to be continued, and the eye to be shaded at work.

November 1st. Has been at work all the time. To discontinue atropine.

November 7th. At present writing, eye very well. Opacity of lens still visible, and perhaps a little increased. To call again.

I have thus reported these two cases in minute detail, so as to give a better idea of the treatment and its results. Every one who has seen and known something of the stubborn nature of hypopion keratitis, how unfavorable the prognosis is, and how slow it gets well, will hail with joy any new remedy that promises better success, and saves considerable time as well as an immense amount of suffering. Had the carbolic acid no other effect than to stop the pain, it would be a very desirable remedy. It acts, however, *specifically*, so to speak, in hypopion keratitis, in consequence, I suppose, of its general anti-suppurative, or anti-septic property. I will not stop here to discuss its medicinal properties. I presume it relieves pain by killing the nerves that are exposed to the atmosphere in the bottom of the ulcer.

It is very easily applied, and is not so severe, except just for a moment. The smarting, I judge, is caused by the glycerine more than by the medicine. Lately I have had an aqueous solution of same strength made, and have been using it. It does not smart

but very little. It always whitens the parts by coagulating the mucus or pus. It does not seem to cauterize the corneal tissue but very little; but is decidedly caustic to the conjunctiva; causes a superficial slough in a very short time. The pure liquid acid is, of course, more caustic than the solutions. There is a person occasionally whom it hurts or burns intensely. This, however, is the exception, not the rule. The diseased points in the cornea should be cleansed perfectly, and then the least possible quantity of the medicine applied, being specially careful to bring it in contact with all of the diseased surface. It may be applied two or three times at same sitting. Special care should be taken to prevent the acid from accumulating in the bottom of the cul de sac, and cauterizing the conjunctiva.

I have used the acid in several cases, and from what I have seen of it, it bids fair to become a valuable remedy in hypopion keratitis. I have a case now under treatment where it is difficult to check the suppuration, on account of the pus burrowing deep down between the laminae of the cornea, so that it is impossible to get the medicine down to it. What is best to be done in such cases, must be determined by further experiments.

During the acid treatment I do not think it advisable to puncture the cornea, except where it is necessary to relieve the eye of the *physical* effects of the pus in the anterior chamber, and that is only necessary where the hypopion is considerable. The constant bathing of the iris tissue in the pus, is the chief cause, in my judgment, of the iritis we nearly always have in hypopion keratitis.

Carbolic Acid in Other Corneal Affections.—In a troublesome case of central leucoma in connection with trachoma, where the eye remained tender, would water, light was unpleasant, and blood vessels were visible in the cornea running to the leucoma. I touched the acid solution to the opacity, and, to my surprise, it relieved the irritability, and by repeating three or four times it made the eye get well. This case had resisted the ordinary treatment for weeks and weeks.

A little boy had keratitis following small-pox, which resisted the usual treatment of atropine, quinine and opium for several weeks. Did not show the least disposition to improve. In this case I used the carbolic acid solution with the most satisfactory result. The next day the little boy thought he was well, and wanted

to go to school. Three or four applications (always using the probe) made the cornea heal up.

In a little girl, where fresh ulceration of cornea was developed, during the treatment for an old keratitis, I touched the ulcer with the acid. Three or four applications requiring as many days were sufficient to make it heal.

In small ulcers of the upper margin of the cornea in connection with acute trachoma, I have used the acid with good results. It not only relieved the pain, but made the ulcers heal, thus preventing the necessity of anodines and delaying treatment. I use the acid nearly every day in some form of corneal trouble. Exactly where it may be used, and where it must not be used, must be determined by further observation. From my experience with it I am satisfied that it will prove to be a valuable remedy in corneal affections, particularly in hypopion keratitis.

It certainly diminishes in some way the resulting opacities of the cornea more especially where there has been a loss of corneal substance, as in fresh ulceration of cornea.

Editor's Table.

DECEMBER DAYS are upon us, and the end of another volume. As the years come and pass in rapid succession with their portion of appointed work, we seem to mark their departure with a word of special notice; and yet what matters it! The past is irrevocable. Let us only enter upon each present day with a hearty welcome to its appropriate duty. We have hoped, as journalists, that we could claim this for ourselves; that with little disappointment for the past or its failures, or carking anxiety about the future or its successes, we have tried honestly to do our work in behalf of the profession of our choice and our love. At any rate the work of the year, be it for good or bad, is brought to an end. The books are closed, and the record made. We do not willingly allow ourselves to believe that the year has been useless, but steadfastly trust that in the sum of professional progress, our journal has contributed its influence, and its measure of worth.

The task of gathering up the material for the year's table of contents has just been completed, and we have had renewed to us many pleasant associations, and memories of valued friends and contributors. Friendly faces seem to look out to us from the printed pages; and, then, too, what a variety and abundance of material is accumulated in these solid pages. Look over the original and selected articles. We are sure all will readily agree that the amount of really acceptable and very practical matter is creditable and satisfactory. Compare the Original Contributions, the Hospital Practice, the Translations, the Editorial Suggestions and condensed information, and we feel very sure few journals of this country surpass us in any of these respects. After all these years of toil, we shall hardly begin now to make special promises. We only say to our friends that we have our arrangements to afford for the coming year quite as good a journal as it has ever been in the past. By your help, good friends, we will strive to make it a good deal better. With your co-operation, we propose, in its spirit, and in all that pertains to the permanent interests of medicine, to make the *Lancet and Observer* lead the van and direct.

In the year that is closing we have had a steady condition of health and prosperity. Our circulation has never advanced rapidly, has never reached any thing like what it ought to receive; but it has never been so good as at present. We trust to our subscribers, all over the country, now to make a large and important addition to our list for the next year. A very little concentrated effort in all directions should easily double our circulation. This would enable us to materially improve the character of the journal, and make it unquestionably the best medical journal in the country. We shall spare no pains or labor, for it is a pleasant labor to us, a labor of love, and we shall expect every sort of material, literary and financial aid from a prompt and friendly list of subscribers. We thank you for the past, and trust you for the future.

ITEMS FROM ABROAD.—From a private letter just received from our friend, Prof. W. H. Taylor, now sojourning at Berlin, we take one or two items of professional interest:

DEATH OF PROF. GRIESINGER.—This great man deceased at Berlin on one of the last days of October. There was a large

funeral, in part made up of the faculty and medical students. We are promised a full account of his last illness.

DR. CONHEIM, another well known German, and who has been Virchow's chief assistant, has accepted a professorship at Kiel University, and enters at once upon his duties there.

THE "SEMESTER" has commenced, and we suppose our friend is in the enjoyment of listening to such oracles as Virchow, Freerichs, Du B. Raymond and other lights. We hope still and frequently to report from him, as well as our other able and graceful correspondent Dr. Whittaker.

SAD CASE OF DEATH BY CARELESS RENEWAL OF A PRESCRIPTION.—Dr. Phillip DeYoung, an experienced physician of Philadelphia, recently prescribed a cathartic pill, composed in part of three grains of assafetida, for his sister, Mrs. Hecht. The pills were renewed several times, but at last, by some terrible ignorance or carelessness, three grains of *atropine* were substituted for the assafetida, of course, with a speedy and fatal result. Several considerations are suggested by this sad affair: 1st. Physicians should be extremely careful in their chirography. There is no excuse for the "fly tracks," abbreviations and hieroglyphics that some physicians adopt in the hurry of a full and exacting practice. As palliation in this case, it was claimed by the druggist that the prescription was nearly illegible, and the characters directing *assafetida* were so abbreviated that he readily mistook the two or three letters for *atropine*. 2d. We shall come probably to a great degree, if not entirely, to require that there be no "renewals" of our prescriptions, or fall back to the ancient customs of dispensing our own prescriptions. 3d. We must insist on educated druggists. In Cincinnati we are moving in this direction. The influence of the Academy of Medicine is being brought to bear upon the Board of Health and the City Council, and we have hopes that it will be *penal* at an early day to dispense impure drugs, or allow prescriptions to be dispensed by incompetent and uneducated clerks.

It is well known here that the salary of drug clerks is very low; hence it follows in almost direct proportion that the majority of those accepting these positions are but inferior men. Our chiefs of establishments apparently not reflecting that every such terrible result, as that chronicled above, is charged to their account

as a matter of responsibility. Drug clerks should be thoroughly trained, not only in the manipulations of pharmacy, but in a good knowledge of *materia medica* and chemistry; and, then, they should receive compensation recognizing in some fair degree the extent of their attainments and capacity.

RECEPTION OF PROFESSORS GROSS AND PANCOAST.—These distinguished medical teachers have been abroad for a season. Upon their return to Philadelphia they have been honored with a public reception. The meeting was held at the Academy of Music, and among the distinguished guests we notice the following as present and giving character to the occasion: Prof. N. R. Smith, of Baltimore, first Professor of Anatomy in Jefferson Medical College; Prof. Austin Flint and son, of New York; Prof. Kinloch, of South Carolina; Prof. George T. Elliott and Prof. L. T. Sayre, of New York; Dr. Atlee, of Lancaster, Penn.; Dr. Marion Sims, Dr. Bozeman and His Honor Mayor McMichael.

There was music, and hospitalities, and speeches. Dr. Hewson greeted the return of the distinguished gentlemen, and speeches were made by Prof. Gross, Prof. Pancoast, Governor Pollock, Dr. Sayre, Dr. Meigs and others. The occasion was evidently one of those genial, enjoyable occasions, that doctors only know how to improve when they have the will.

THE season of opening the various Medical Colleges of the country has already passed, and last month we noticed some of the exercises pertaining to these interesting epochs in student life. Apropos to these matters, we notice in a recent number of the *Boston Medical and Surgical Journal* that Prof. D. H. Storer, who has been so long connected with the Massachusetts Medical College, has at length resigned his position in the school. Prof. Holmes, in his Introductory, makes a very eloquent and pleasant notice of his long-time colleague.

THE RHODE ISLAND HOSPITAL.—We find in the last number of the *New York Medical Journal* an account of the opening of this new hospital, together with a view of the ground plan and the

plans of the several floors. The idea is a central building with departments for offices, lecture rooms, etc., and pavilions for wards. The general plan of the structure does not materially differ from the plan of the Cincinnati Hospital, soon to be opened for patients. The Rhode Island Hospital, at Providence, was formally opened on the 1st of October ultimo, with an address by Prof. William Gamell.

MEDICAL STUDENTS.—The medical classes in Cincinnati are scarcely so large as last year, though probably they do not very materially differ in number from previous classes. We understand the same holds true of classes elsewhere. In St. Louis, as we learn, and Louisville, the number of matriculants will not come up to previous years. We do not deem this a matter to be complained of. If the material is improved, and the character of the graduating classes is elevated, we shall rather congratulate our friends engaged in medical teaching. We are not suffering so much from any lack of numerical strength as from a complete fitness for the great work of the physician.

THE *Medical Bulletin*, a journal of medicine and surgery, is a new member added to the medical journal family. Dr. Edward Warren is editor. It hails from Baltimore—is issued on the 1st and 15th of each month. We are pleased to add it to our exchange list, and to welcome our old *confrere*. Dr. Warren, back to the ranks, though we are scarcely reconciled to the style adopted.

A NEW MEDICAL SCHOOL ENTERPRISE.—We have received a complimentary ticket to the Course of Lectures in Physiology and Pathology in Cumberland University Medical Department by Prof. E. S. Gaillard. It is well known to many that the University of Nashville has been undergoing a process of "reconstruction." One of the results of that process is, that some of the old fixtures as Prof. Eve, and, perhaps, some others, have been retired. How far that explains the organization of the Medical Department of Cumberland University we can not say, but we understand that organization has been effected and will go into operation at an early date. Prof. Paul F. Eve, of Nash-

ville, and Prof. E. S. Gaillard, of Louisville, have been named as part of the new Faculty. Dr. Gaillard is pleasantly engaged in the Kentucky School of Medicine, and Dr. Eve has gone to St. Louis, and accepted for the present, the vacancy made by the death of Dr. McDowell. How far these new relations will interfere with the new enterprise of the Medical Department of the Cumberland University we are not prepared to say. In view, however, of the general interests of medical teachings, we should hope the interference would be permanent.

MEDICAL JOURNALISM IN THE UNITED STATES.—Among the reports to the volume of *Transactions of the American Medical Association* for 1868, we have just read, with considerable interest, that on Medical Literature, by our townsman, Prof. George Mendenhall. Of the topics very cleverly treated, considerable space is given to the recognition of the merits of medical journalism. Dr. Mendenhall, as we think, very correctly expresses the difficulties, as well as the successes of the busy physician, when he says:

"When we consider the manner of occupation of a physician's time, particularly in this country, it is wonderful that there is so much written and so well written as it is. We are a new people; immaturity is necessarily characteristic of most of our productions. While we excel in many things, and men of talent arise among us in every department of life, towering to an equality and even surpassing those of older countries, we must admit that the average standard is rather below the most of them. The mass of physicians while not destitute are struggling for a comfortable subsistence for themselves and rising families; exceptions occur in our older cities, but this is the condition of the majority. The time of members of the profession is therefore largely absorbed in obtaining a livelihood; and this interferes greatly with literary pursuits. The irregularities and liability to frequent interruptions incident to the nature of our duties, and different from the circumstances surrounding every other profession, are unfavorable to deliberate observation, thought and writing. Short intervals of devotion to a subject must necessarily prevent connectedness, clearness and force in communicating ideas. The heavy pressure on the mind of the physician under the respons-

ibility of cases of dangerous illness, to which are often added the importunities and unreasonable criticisms of anxious friends, is also a circumstance badly calculated to favor careful study, or excellence in composition. On the other hand, the every-day training and occupation of lawyers and theologians accord with their improvement and perfection in expressing themselves with elegance, perspicuity and ease."

Speaking in detail of the medical journals of this country, he alludes briefly to the *Lancet and Observer*, and, after a summary of its history as a medical periodical, says: "It has been regularly published for over a quarter of a century, and is, we believe, the oldest medical periodical in this country, except the *American Journal of Medical Sciences* and the *Boston Medical and Surgical Journal*. It is well patronized, and presents as much or greater vigor than it has at any period of its existence." The *Lancet* was founded by the late Prof. Lawson in 1842; the *Lancet and Observer* being the continuation of that journal, has, therefore, nearly completed twenty-seven years of existence, as we hope, of useful life.

AT LAST.—For several months past, the Academy of Medicine, of Cincinnati, has been engaged in discussing the *nature of diphtheria*. The labors of this body on this subject have at last been brought to a safe termination. Each member was given ample opportunity to ventilate his own opinions, as well as those of others—chiefly others. The discussion may be characterized as eminently *recondite*. It demonstrated two things, viz.: That much may be said on both sides of a question without doing material damage to the sides; and that a very small idea may be packed around with, and obscured by, a very large number of words. At times it would have puzzled an observer to determine whether the discussion was in relation to *mem-branes* or *members*. The "Fathers" were conscripted, and Bretonneau sent back to the antediluvian period, without a sign of remorse. Some nice discriminations were made between tweedledee and tweedledum. The members of the Academy have the faculty of misunderstanding each other, developed to a remarkable degree.

We hope much from this society, because it manifests evidences of vitality, and because there is abundant room for improvement.
Medical Herald.

UNUSUAL EFFECT OF SUBCUTANEOUS INJECTION.—By F. Woodhouse Braine, F. R. C. S.—Mrs. H. C.—, aged 35, in good health otherwise, had been kept awake for seventy-two hours by intense neuralgic pain on the left side of the head, face and neck, arising from a carious molar tooth on the left side of the lower jaw. She was injected with morph. acet., 1-3 gr. At 1 A. M. on June 28th last, the morphia, dissolved in about four drops of water, was introduced under the skin of the left arm, just over the insertion of the deltoid. No blood appeared at the puncture. In about fifteen seconds, tightness of the chest and difficulty in breathing was complained of, and the patient asked to be raised, saying she felt as if she were dying. Her face and lips now became pale; speech became indistinct (not inaudible); pulse irregular; some spasms of the facial muscles took place, and she fell back to all appearance dead. Cold water was freely dashed over face and chest—and, as she was unable to swallow, her tongue was rubbed over with sal volatile, and ammonia applied to her nose, artificial respiration being kept up at the same time. During this time her face was blanched, pulse not to be felt, and respiration not to be perceived. Insensibility continued for about three minutes; then, happily, one or two feeble beats of the pulse, and a shallow inspiration or two, showed returning animation. She then became conscious; pulse feeble, but regular; respiration slow; fingers remained numbed, and both thumbs were firmly drawn into the palms of the hands. This passed off in about six minutes, leaving her feeling very ill, but free from neuralgic pain, which did not return. There was no feeling of nausea, and no attempt at vomiting during any part of the time.—*Medical Times and Gazette.*

NEW WORKS TO BE PUBLISHED BY THE NEW SYDENHAM SOCIETY.—Four works will be published by this learned Society during the year 1869. The second volume of *Trousseau*, the second of *Lancereaux*, a Biennial Retrospect for 1867-8, and a sixth fasciculus of the *Atlas of Skin Diseases*.

MARRIED.—Conover—Ivins.—October 15th, at Grass Vale, Pennsylvania Manor, Penn., by the Rev. K. P. Ketcham, of Allentown,

N. J., Dr. Simon B. Conover, of Tallahassee, Florida, and Miss Lizzie H. Ivins, of Pennsylvania Manor.

Dr. Conover for a time sojourned in this city, a worthy and honorable gentleman, engaged in hospital duty. He is now State Treasurer of Florida. We extend to him our very sincere greetings and hearty good wishes.

Miller—Wilson.—November 5th, by the Rev. F. W. Brauns, Dr. B. F. Miller, and E. Belle Wilson, all of this city.

Our sincerest congratulations attend the happy couple.

WHEN a certain facetious doctor was asked how they could commemorate the discovery of ether, he replied, "Very simple. One pedestal! Two statues! Morton here! Jackson there! Underneath the simple inscription—'To Ether!' "

A CERTAIN SPECIFIC.—It has been observed by the faculty that punctuation is an infallible remedy for a bad cold, provided the patient stops at home?

A GERMAN clergyman, in Australia, preached in favor of Morrison's pills. They are said to be good to "clean the blood," and as the Bible says "the blood is the life," it was the duty of every christian to swallow a few frequently! With an eye to business, the excellent man keeps them on sale for the benefit of his flock!

Reviews and Notices of Books.

Atlas of Venereal Diseases.—Part V.

As the several parts of this magnificent work have appeared, we have made a notice of its character in this journal. We have now the last part, with general index, translations, preface, etc., completing a re-print with annotations that we are very sure will be regarded by syphilographers as one of our most valuable con-

tributions to this special department. It may be something of a matter of surprise that Dr. Bumstead, an ardent duelist, should edit this work of Cullerier, equally sanguine as an unitist; but the result is the entire discussion and elaboration of the subject in all its aspects. The chromo-lithographic plates are beautiful, giving us, we venture to say, specimens of the most beautiful color printing ever issued by the medical press of this country. For sale by Robert Clarke & Co. Price, \$3, each part.

Outlines of Physiology, Human and Comparative. By John Marshall, F. R. S., Prof. of Surgery in the University College, London, etc., etc., with additions by Francis G. Smith, M. D., Prof. of Institutes of Medicine in the University of Pennsylvania. Illustrated with numerous wood-cuts. Philadelphia: Henry C. Lea, 1868.

We have numerous excellent works on Physiology. Indeed, the progress of this department of our science has wonderfully advanced within a few years, and recent standard works are its wonderful record. Prof. Smith, however, in introducing the present new work by Dr. Marshall, has the following: "It is no disparagement," he says, "to the many excellent treatises on Physiology, both at home and abroad, to say that in some respects this one is better adapted for general use as a text book. It is compendious, and yet abounds in all the more recent views and discoveries; and it presents, in connection with human physiology, a brief sketch of each function as it appears in the lower orders." This condensed expression of its approval in a good degree indicates what is peculiar in the plan of the author.

The work is handsomely gotten up, the paper and printing is good, and the binding substantial; so that the whole is presented in elegant shape. For sale by Robert Clarke & Co. Price, \$7.50.

A Treatise on the Principles and Practice of Medicine, designed for the use of practitioners and students of medicine. By Austin Flint, M. D., Prof. of Principles and Practice of Medicine in Bellevue Hospital Medical College, etc., etc. Third Edition, thoroughly revised. Philadelphia: Henry C. Lea, 1868.

It seems to be pretty well agreed that when the profession so far accepts and adopts a text book as to demand a third edition

that it has passed beyond the propriety of serious criticism. We believe the first edition of Prof. Flint's work made its appearance after January, 1866. This third edition is, therefore, within three years, certainly as prompt and brilliant success as an author could reasonably hope for; but we are glad to say, for the credit of American authorship, that the success is abundantly deserved. The author in his preface modestly says, that he has introduced additions derived from his clinical studies, and from the latest contributions in medical literature, which it is believed will enhance considerably the practical utility of the work. Flint's Practice is by no means so comprehensive as some of its more pretentious compeers; but is practical, clear, founded on much reading and extended observation, and will prove a safe guide to the practitioner; as such we cordially commend it. For sale by Geo. S. Blanchard & Co. Leather, \$7.

The Science and Practice of Medicine. By William Aitken, M. D., Edinburgh, Prof. of Pathology in the Army Medical School. Second American from the fifth enlarged and carefully revised London edition, with large additions by Meredith Clymer, M. D., etc., etc. In two volumes, with a map, lithographic plate, and numerous illustrations on wood. Philadelphia: Lindsay & Blakiston, 1868.

Upon the appearance of the first American edition of Dr. Aitken's comprehensive work on the Science and Practice of Medicine, we fully noticed its character, and commended it to the favor of our readers. At that time we scarcely realized that in so short a period we should receive the second American edition, and with so many and such important additions to its text; additions, indeed, which of themselves almost constitute a treatise on medicine; and yet in looking over the numerous articles added by the author, and the very important additional articles by the American editor, we scarcely see how their consideration should have been overlooked.

The profession has very eagerly sought after this work, and have doubtless received profit and improved methods from its study. With the additions and improvements introduced in the present edition, physicians will doubtless continue to regard it as important for their library and constant reference. For sale by Robert Clarke & Co. Price, \$12.

Business Notices and Acknowledgments.

NEW BOOKS.

TRANSACTIONS of the American Medical Association. Vol. XIX., 1868.

AITKEN's Science and Practice of Medicine. Vol. II. Lindsay & Blakiston.

FLINT's Practice of Medicine, Henry C. Lea.

MARSHALL's Outlines of Physiology. Henry C. Lea.

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